

THE BOSTON Medical and Surgical JOURNAL

VOLUME 193

JULY 2, 1925

NUMBER 1

The Massachusetts Medical Society

PROCEEDINGS OF THE COUNCIL

ANNUAL MEETING, JUNE 9, 1925

The annual meeting of the Council was held in the hall of the John Hancock Mutual Life Insurance Company, No. 197 Clarendon Street, Boston, Tuesday, June 9, 1925, at 11.45 o'clock, a. m. The President, Dr. E. H. Bigelow, of Framingham Center, was in the chair and the following 129 councilors present:

BARNSTABLE
W. D. Kinney

BERKSHIRE
A. P. Merrill

BRISTOL NORTH
W. O. Hewett
F. A. Hubbard

BRISTOL SOUTH
E. F. Curry
R. B. Butler
E. F. Cody
G. H. Hicks
R. W. Jackson
C. J. Leary
W. A. Nellid
I. N. Tilden

ESSEX NORTH
R. C. Hurd
E. S. Bagnall
J. F. Burnham
T. R. Healy
A. M. Hubbell
F. S. Smith
F. W. Snow

ESSEX SOUTH
J. A. Bedard
H. K. Foster
J. F. Jordan
F. W. Baldwin
W. T. Hopkins
W. G. Phippen
R. E. Stone

FRANKLIN
B. P. Croft
G. P. Twitchell

HAMPDEN
W. C. Leary
J. M. Birnie
M. B. Hodskins
J. P. Schneider

MIDDLESEX EAST
C. R. Henderson
Richard Dutton
H. A. Gale
A. E. Small
James Blenkhorn

MIDDLESEX NORTH
J. F. Boyle
A. R. Gardner
W. B. Jackson
J. H. Lambert
J. A. Mehan

MIDDLESEX SOUTH
E. H. Bigelow
A. H. Blake
W. H. Crosby
D. F. Cummings
F. G. Curtis
I. J. Fisher
C. B. Fuller
F. A. Higginbotham
Edward Mellus
C. E. Mongan
J. P. Nelligan
Dwight O'Hara
C. F. Painter
A. C. Potter
L. H. Raymond
J. W. Sever
C. H. Staples
E. H. Stevens
A. K. Stone
H. W. Thayer
F. VanNys
H. R. Webb

NORFOLK
D. N. Blakely
H. K. Boutwell
G. G. Bulfinch
W. L. Burrage
Samuel Crowell
D. G. Eldridge
C. S. Francis
Maurice Gerstein
A. H. Hodgdon
G. W. Kaan
Bradford Kent
C. J. Kickham
Edward Martin
S. F. McKeen
M. V. Pierce
Victor Safford
Eugene Thayer
H. F. R. Watts

NORFOLK SOUTH
C. S. Adams

D. A. Bruce
W. G. Curtis
O. H. Howe

PLYMOUTH
J. E. Bacon
J. H. Drohan
T. H. McCarthy

SUFFOLK
J. W. Bartol
M. E. Champion
David Cheever
A. L. Chute
A. H. Crosbie
R. L. DeNormandie
W. H. Ensforth
G. B. Fenwick
Channing Frothingham
Henry Jackson
E. P. Joslin
G. A. Leland, Jr.
Donald Macomber
G. B. Magrath
J. H. Means
R. H. Miller
T. J. O'Brien

Alexander Quackenboss
Jane D. K. Sabine
J. J. Skirball
J. S. Stone
G. L. Tobey, Jr.
R. H. Vose

WORCESTER
F. H. Baker
W. P. Bowers
L. R. Bragg
W. J. Delahanty
G. A. Dix
D. E. Emery
M. F. Fallon
J. J. Goodwin
R. W. Greene
David Harrower
E. L. Hunt
A. G. Hurd
A. W. Marsh
L. C. Miller
G. O. Ward
F. H. Washburn

WORCESTER NORTH
W. E. Currier

The record of the last meeting was read in abstract by the Secretary and as there were no errors or omissions noted it was accepted as read and printed. The Secretary read the names of the Nominating Committee by districts, the following principals or alternates answering to their names and then retiring to deliberate: BARNSTABLE, W. D. Kinney; BERKSHIRE, A. P. Merrill; BRISTOL NORTH, F. A. Hubbard; BRISTOL SOUTH, E. F. Cody; ESSEX NORTH, T. R. Healy; ESSEX SOUTH, W. T. Hopkins; FRANKLIN, G. P. Twitchell; MIDDLESEX EAST, A. E. Small; MIDDLESEX NORTH, A. R. Gardner; MIDDLESEX SOUTH, E. H. Stevens; NORFOLK, D. G. Eldridge; NORFOLK SOUTH, C. S. Adams; PLYMOUTH, T. H. McCarthy; SUFFOLK, David Cheever; WORCESTER, David Harrower.

Dr. Blakely, chairman, read the following report. Moved and seconded that the report be accepted and its recommendations adopted.

REPORT OF COMMITTEE ON MEMBERSHIP AND FINANCE, ON MEMBERSHIP

The Committee on Membership and Finance makes the following recommendations as to membership:

1. That the following named four Fellows be allowed to retire under the provisions of Chapter I, Section 5, of the By-Laws:

1. Cobb, Frederic Codman, Hamilton, Bermuda, as of January 1, 1925.
2. DeLand, Charles Airmet, Warren, as of January 1, 1926.

3. Houston, John Alexander, Northampton, as of January 1, 1926.
4. Johnson, William Augustus, Lowell, as of January 1, 1926.

Also that the following named retired member be restored to active fellowship under a provision of the same section.

Jackson, Charles William, Monson.

2. That the dues for 1924 and 1925 of the following named Fellow be remitted under the provisions of Chapter I, Section 6, of the By-Laws:

1. Beaulieu, Francis Xavier, Taunton.
3. That the following named seven Fellows be allowed to resign under the provisions of Chapter I, Section 7, of the By-Laws:
1. Callahan, Henry Alphonsus, U. S. A., as of December 31, 1924.
2. Faxon, Nathaniel Wales, Rochester, New York, as of December 31, 1924.
3. Haskell, Henry Hill, Auburndale, as of December 31, 1925.
4. Mansur, Leon Wallace, Los Angeles, California, as of December 31, 1924.
5. Olin, Harry, St. Louis, Missouri, as of December 31, 1925.
6. Tso, Ernest Teh, Peking, China, with remission of dues.
7. Woo, Shutai Tinwang, Peking, China, with remission of dues.

4. That the following named two Fellows be deprived of the privileges of Fellowship, under the provisions of Chapter I, Section 8, of the By-Laws:

1. Anthony, Jeremiah Christopher, Springfield.
2. Dempsey, James Edward, formerly of Newton, present residence unknown.

5. That the following named thirteen Fellows be allowed to change their membership from one District Society to another without change of legal residence, under the provisions of Chapter III, Section 3, of the By-Laws:

One from Middlesex South to Norfolk.

1. McEvoy, George Albert, Newton.

Five from Middlesex South to Suffolk.

1. Chamberlin, Harold Augustus, Newtonville.
2. Jones, Stephen George, Arlington.
3. Parkins, Leroy E., Auburndale.
4. Wolfson, Louis Elijah, Malden.
5. Wood, William Franklin, Belmont.

Seven from Norfolk to Suffolk.

1. Colburn, Frederick Wilkinson, Hyde Park.
2. Coleman, Robert Martin, Wellesley.
3. Crosbie, Arthur Hallam, Brookline.
4. Hodgkins, Edward Marshall, Brookline.
5. O'Hare, James Patrick, Jamaica Plain.
6. Richardson, Edward Peirson, Brookline.
7. Spooner, Lesley Hinckley, Brookline.

DAVID N. BLAKELY, *Chairman*.

Dr. Blakely read the following report on finance and it was accepted and its recommendations adopted by vote:

REPORT OF COMMITTEE ON MEMBERSHIP AND FINANCE, ON FINANCE

The Committee on Membership and Finance makes the following recommendations as to finance:

1. That the Council appropriate at this time \$300 for the work of the Committee on Public Health to cover a payment for work begun, but not completed, in 1924. (It should be noted that this Committee

had an unexpended balance of \$539.88 at the close of last year.)

2. That Fellows of the Massachusetts Medical Society, in good standing, living in foreign countries shall receive the *Journal* of the Society without charge for postage.

DAVID N. BLAKELY, *Chairman*.

The Secretary read the reports of the committees appointed at the last meeting to consider the petitions of these four Fellows for restoration to the privileges of fellowship and they were all accepted under the usual conditions: W. I. Wiggins, W. G. Stickney, C. A. C. Richardson, R. H. Blanchard. On nomination by the chair committees were appointed by the Council for the following eight petitioners for restoration, respectively:

T. B. Rafferty, Lynn	<ul style="list-style-type: none"> J. A. Bedard J. W. Trask N. P. Breed
T. F. Henry, Salem	<ul style="list-style-type: none"> W. G. Phippen G. E. Tucker M. T. Field
H. E. Miner, Holyoke	<ul style="list-style-type: none"> J. C. Hubbard G. D. Henderson E. P. Bagg, Jr.
E. A. Barrier, Boston	<ul style="list-style-type: none"> A. H. Crosbie C. H. Hare E. T. Wyman
J. T. Reynolds, Quincy	<ul style="list-style-type: none"> F. E. Jones J. H. Ash N. S. Hunting
T. E. A. McCurdy, Boston	<ul style="list-style-type: none"> G. M. Balboni W. E. Chenery H. H. Hartung
J. T. Buckley, Worcester	<ul style="list-style-type: none"> E. L. Hunt G. A. Dix R. W. Greene
H. N. Ginsburg, Lowell	<ul style="list-style-type: none"> T. A. Stamas J. Y. Rodger M. H. Hymen

Dr. Painter, chairman, read a report for the Committee on Medical Education and Medical Diplomas. (See Appendix No. 1.) It was accepted and its recommendations adopted by vote as was a revised list of medical colleges, diplomas from which are accepted from candidates for fellowship, prepared under a vote of the Council, passed on February 4, 1925. A copy of the new list is a part of this record.

Dr. Henry Jackson read the report of the Committee on Ethics and Discipline. (See Appendix No. 2.) It was greeted with applause and accepted by vote. Dr. T. J. O'Brien, secretary, read the report of the Committee on State and National Legislation (see Appendix No. 3) and it was accepted. At this point the Nominating Committee returned and placed the following list of nominations on the blackboard: *President*: James S. Stone, Boston; *Vice-President*: Michael F. Fallon, Worcester; *Secretary*: Walter L. Burrage, Brookline; *Treasurer*: Arthur K. Stone, Framingham Cen-

ter; *Librarian Emeritus*: Edwin H. Brigham, Wellesley Hills; *Orator*: Charles F. Painter, Newton. The President appointed as tellers to distribute, sort and count the ballots: C. S. Adams, J. H. Lambert, B. P. Croft, G. W. Kaan. On completing their labors Dr. Adams announced that each name in the above list had received 120 ballots and the President declared them elected.

Dr. Safford presented the report of the Committee on Public Health (see Appendix No. 4), also the manuscript of a manual for making health examinations, of 79 pages, that had been prepared for the committee by Dr. Joseph Garland during the past six months; also the manuscript of a booklet, 222 pages, on "The Control of the Communicable Diseases Prevalent in Massachusetts with a study of the mortality due to them during the past seventy-five years," written by Dr. Edward G. Huber. The report was accepted by vote. Dr. Safford offered the following motion: *Moved*, That the report relative to methods for the control of communicable diseases and the manual for making health examinations, submitted to the Council by the Committee on Public Health today, be both referred to the Committee on Publications and Scientific Papers with authority to arrange for their publication, if and as this committee may deem advisable. Dr. Samuel Crowell called attention to the fact that the publication of these manuscripts would require an appropriation and he suggested that the proposition be submitted to the Committee on Membership and Finance. The Council passed Dr. Safford's motion and also a motion that the matter of an appropriation for publishing be referred to the Committee on Membership and Finance. Dr. A. P. Merrill, chairman, submitted the report of the Committee on Public Instruction, embodying a study by that committee on Commercial Health Examinations. (See Appendix No. 5.) A motion to accept the report and adopt its recommendations was made, seconded and carried. The chair called for the reports of four separate special committees; there were no reports offered. For the delegates of the Society to the recent meeting of the House of Delegates of the American Medical Association at Atlantic City Dr. Mongan presented a partial report. As a member of the committee on legislation his attention had been called to the narcotic situation, which was a serious one in certain parts of the United States, due partly to the fact that the Geneva Conference came to no conclusion before it broke up. That the matter of adjustment may not be governed by a lay organization the American Medical Association is to try to control the situation by means of a committee which will give its aid and advice to any organization as to the dispensing of narcotics. Another matter of importance was a resolution passed by the House of Delegates instructing

the trustees to hire and send to Washington an agent who shall watch legislation having to do with the public health, thus giving a better chance to the Association to stop injurious legislation. The rules of the Federal Income Tax, as regards physicians, are not just and several states have urged their representatives in Congress to have them modified. All business organizations are permitted to deduct from their income any expenses incurred by their agents in travelling in the interests of the firm. The physician cannot deduct the expenses of travel to and from medical meetings or the money spent for postgraduate instruction. The war tax on physicians for the prescribing of narcotics is unjust and should be modified. The Association, through its Bureau of Legal Medicine and Legislation, has urged the state medical societies to labor with their congressmen to bring about a change.

The chair read the following list of nominations for standing committees for the ensuing year and on proceeding to vote they were all appointed:

COMMITTEE OF NINE FOR THREE YEARS

W. H. Robey, R. I. Lee, R. B. Osgood.

OF ARRANGEMENTS

John Rock, L. S. McKittrick, W. T. S. Thorndike, James Hitchcock, E. P. Hayden, H. Q. Gallupe.

ON PUBLICATIONS AND SCIENTIFIC PAPERS

E. W. Taylor, R. B. Osgood, F. T. Lord, R. M. Green, A. C. Getchell.

ON MEMBERSHIP AND FINANCE

D. N. Blakely, Algernon Coolidge, Samuel Crowell, Gilman Osgood, Homer Gage.

ON ETHICS AND DISCIPLINE

Henry Jackson, David Cheever, W. D. Ruston, S. F. McKee, W. C. Kelth.

ON MEDICAL EDUCATION AND MEDICAL DIPLOMAS

C. F. Painter, J. F. Burnham, A. G. Howard, R. L. De Normandie, H. P. Stevens.

ON STATE AND NATIONAL LEGISLATION

J. S. Stone, E. H. Stevens, F. E. Jones, T. J. O'Brien, J. M. Birnie.

ON PUBLIC HEALTH

Victor Safford, Annie L. Hamilton, E. F. Cody, R. I. Lee, T. F. Kenney.

ON PUBLIC INSTRUCTION

A. P. Merrill, Kendall Emerson, W. P. Bowers, J. S. Stone, G. C. Shattuck, W. H. Robey, R. I. Lee.

In the same manner these delegates to the House of Delegates of the American Medical Association for a term of two years from June 1, 1925, were appointed:

F. B. Lund, Boston; alternate, W. H. Robey, Boston. E. F. Cody, New Bedford; alternate, F. W. Anthony, Haverhill.

The Secretary read the resolutions concerning the administration of anesthetics by nurses, passed by the Middlesex East District Medical Society and referred by that body and by the Norfolk District Society to the Council for action, as follows:

Whereas, We believe that progress in the art and science of anesthesia in the past quarter century has made necessary a thorough understanding of the fundamentals of medicine as a groundwork; that a proper interpretation of the physical findings as exhibited by the patient is necessary for the best selection of the anesthetic as between ether, nitrous oxid, chloroform, ethylene, spinal or regional anesthesia or their combinations; that in the performance of a surgical operation an understanding of the various steps in the operation is necessary for the most successful anesthesia; that it is acknowledged by those surgeons who use a medical anesthetist in their team that he has demonstrated his value for the safety of the patient, and

Whereas, We believe that the nurse anesthetist is not qualified by her training to make a physical examination of a patient and properly evaluate the findings; that regardless of her skill as a technician she has not the groundwork of medical training to interpret the physical changes and emergencies which may arise during the progress of an operation; that in the use of so potent a drug as to produce unconsciousness conditions must arise where action or inaction must depend upon her judgment and not that of the surgeon; that she is by this lack of medical training indirectly a menace to the public health and, in the exercise of that judgment, practising medicine, therefore,

Be it resolved, That we, the Middlesex East District Medical Society, in meeting assembled, do hereby petition the Council of the Massachusetts Medical Society to advocate the limitation of the use of anesthetics to the medical profession and to take such steps as may be necessary to abolish the practice of the administering of anesthetics by nurses.

Dr. A. E. Small offered the following motion: *Moved*, That a committee of four be appointed by the President to study the question of nurse anesthesia in its legal, educational and medical aspects and report to the Council at the October stated meeting the best method to adopt to abolish nurse anesthesia. Dr. J. S. Stone said he would be willing to accept the motion if the words in the last line after the word "meeting" were left out. The motion was discussed by Dr. Mellus, Dr. Merrill and Dr. Small, the last named reading a lengthy typewritten discussion of the subject of nurse anesthesia. Finally Dr. Small agreed to omit the words following the word "meeting" and the motion, as amended, was passed. In accordance with the vote the President appointed this committee: A. E. Small, C. F. Painter, F. G. Balch, P. E. Truesdale.

Dr. Bowers said that there had been a feeling in the community that Boston should establish an academy of medicine to coördinate all the medical activities of the community for the purpose of bringing about greater influence; that the Boston Medical Library had established and maintained since 1901 a system very much like that of the Academy of Medicine in New York; that at the present time the Boston Medical Library has outgrown its accommodations. He believed that the Massachu-

setts Medical Society would like to coöperate with the Boston Medical Library and with all other medical organizations which have for their purpose the increasing of the efficiency of medicine and to promote education relating to medical affairs, and with that object in view he presented the following resolutions:

Believing that the public welfare will be promoted by the coöperation of all persons and organizations interested in advancing medical knowledge and practice and in disseminating information upon medical subjects, it is hereby

Resolved, That the Council of the Massachusetts Medical Society in session assembled, this ninth day of June, 1925, favors an association of the Boston Medical Library, the Massachusetts Medical Society, the Massachusetts Homeopathic Medical Society, the Massachusetts Dental Society, the Massachusetts Veterinary Society, the New England Branch of the National Nursing Association and all other reputable organizations interested in the welfare of society through the application of medical knowledge and allied science; and it is further

Resolved, That the Massachusetts Medical Society should use its influence and, so far as may be reasonable, its financial resources in furtherance of such plans as may be approved.

Dr. Merrill asked: "Approved by whom?" Dr. Bowers replied: "Approved by the Society." On motion, duly seconded, the resolutions were adopted by vote. Dr. Mongan said that he would like to have the Society establish a new Section of Physiotherapy, that great strides had been made in this branch of treatment, that there were so many different methods of treatment on the market, each sponsored by some commercial concern, that the average practitioner was at a loss to know which to employ. He moved that such a Section be established. The motion was seconded, put to a vote and passed.

Dr. Croft said he would like to say a word to impress upon the members of the Council their responsibility in supporting the standing Committee on State and National Legislation in its labors in trying to stop bad legislation; he had reason to believe that the chiropractors are about to receive recognition in this state in the near future; he thought that money should be spent in order to influence legislators to a correct understanding of the situation in order that the cults should be stopped; the 4200 members of this Society want proper recognition by the General Court.

Dr. Painter moved and it was *Voted*, That the vote passed at an adjourned meeting of the Society, October 3, 1860, disclaiming responsibility for the opinions expressed by the orator of the Massachusetts Medical Society, published at the head of each annual discourse since that time, be and it hereby is repealed.

Adjourned at 1.45 P. M.

WALTER L. BURRAGE,
Secretary.

APPENDIX TO PROCEEDINGS OF THE COUNCIL

NO. 1

REPORT OF THE COMMITTEE ON MEDICAL EDUCATION AND MEDICAL DIPLOMAS

It seems that now is the time, while making a report upon the Chicago meeting of the Council on Medical Education, last March, to call the attention of the Council of this Society to a few problems that we have of our own. The legislative program of your Committee on Medical Education was an ignominious failure this year. It always has been a partial failure, but this year it was worse than that. I am convinced, however, that a large majority of the members of this Society believe in an adequate preparation for the practice of medicine. Furthermore I feel pretty well assured that there is no very serious disagreement as to what such a preparation should consist of as a minimum standard. I don't believe there are very many of our members who do not feel much as the Boston baseball fan feels whose local club habitually plays in the "cellar" position, when they are reminded from year to year that Massachusetts is occupying a similar position so far as registration in medicine is concerned. It is high time this Society bestirred itself. If we feel a minimum standard as low as that which we allow our Board of Registration to adhere to in passing upon candidates who come before it, is too low and a menace to our people, a reflection upon our profession and an injury to our practice, then we certainly should try and get together on some issue upon which we may all agree. I have met all sorts of objections to the efforts we have been making these past few years. Some men tell me it is a mistake to try to suppress the low standard school. That such efforts only result in placing them in a position of martyrdom. That it would be better to give them rope enough and let them hang themselves. Some say it is only through such schools that the "poor boy" has any chance to secure a medical education of any sort; that this Society has on its rolls many of these men who have made good. At least one member of the Board of Registration has repeatedly, publicly expressed his hope that these schools would be able to improve their standards, and this in the face of the facts, which all go to show that no such effort has ever been made and that they have continuously fought all suggestions to clean house and have been willing to employ any methods that would circumvent the procurement of better conditions here in this State. The quality of the material which is attracted to these schools one may judge of by the lengths to which they are allowed, and I believe encouraged, to go in their efforts to accomplish their ends. It is this State which, perforce, must absorb the majority of this material, for there is scarcely anywhere else they may go. The Board, two years ago, aligned itself openly in the hearings on the bill before the General Court, with the lobby conducted by the opponents of the bill which this Committee introduced. The only logical inference one can draw from their conduct is that they had put themselves in a position where allegiance to low standards was more impelling than allegiance to the interests of the Massachusetts Medical and Massachusetts Homeopathic Societies, to one or the other of which the majority of them belonged.

It is unbelievable that a society of professional men numbering forty-two hundred, having ideals which have been held high for more than one hundred years, in a state where the intelligence of the citizens is well above the average, should not be able to arouse enough interest on a subject which touches the layman no less closely than it does the

physician, to a point where it should be easy to secure legislation adequate for the best interests of both. It is all the more incredible when the opposition is of such a character as it is. The debacle this year was brought about by the political ambitions of one of our own profession who was responsible for putting over for consideration by a special recess committee all the medical bills of the 1923-24 session. The report of that committee was of such a nature that it became the easiest thing in the world for the lobby of the low grade schools to so split up the questions at issue and align sufficient opposition to one or another of the features of the bill, so that the only one that was going to hurt them or in which the Massachusetts Medical Society was particularly concerned was eliminated entirely. Money is spent freely by the schools who oppose our legislative efforts. They employ a paid lobbyist. An edition of the Caduceus, which they claim equalled twenty thousand copies, and which was supplied to every legislator, cannot be published without cost to someone, and though the Middlesex faculty disclaim responsibility for the publication, he would be an extremely credulous individual who could be persuaded to believe that they did not, in some way, financially back it. It is probable that there has been a reaction against the tendency to too great a refinement of the medical curriculum in our "A" grade schools. I am one who has believed all along that the development of certain essential traits in a good doctor were having but little attention paid them in our medical school courses, but this is an entirely different question from whether or no matriculants should come in, poorly prepared to cope with what is perfectly legitimate in medical school programs of today, or that they should be graduated without having had the opportunities or the facilities for preparing themselves for practice which are commonly recognized as necessary and which they advertise to provide. Don't let us confound the issues in this matter and withhold our whole-hearted support to efforts to put Massachusetts where she should be among her sister states because we think there is too "high brow" an element creeping into medical education. With those who hold that belief I agree, but granted that it is true the matter is not going to be set right either for the schools, the public or ourselves by favoring a "low brow," and, worse than that *infinitely*, a *low toned* profession. I am sure I will not hurt anyone's feelings when I say we who are assembled here are a reasonably intelligent group of medical men. Can we not put our gray matter to work to devise a platform upon which we may all stand, while we are stripping ourselves of the impediments (prejudice, misunderstanding, jealousy, indifference, ignorance and laziness) which hamper us, and then step down in the arena and strike a few blows that will tell?

As the bill which the Committee on Medical Education had advocated in 1923-24 was a part of the recess committee's report and recommendation for enactment was pending in committee at the time of the Chicago Conference on Medical Education, I arranged with Dr. Rushmore, who was to be present, to summarize the proceedings of the various sessions, which he has done in the following communication:

MEETING OF THE COUNCIL OF THE AMERICAN MEDICAL ASSOCIATION ON MEDICAL EDUCATION AND HOSPITALS

The past twenty-five years have been characterized by rapid changes in medical education, and the progress of the medical sciences has had an important part in the transformation which constituted the subject of the symposium at the recent meeting in Chicago of the Council on Medical Education and Hospitals of the American Medical Association.

The controlling idea as pointed out by the acting chairman, Dr. Wilbur, is the development of the school of medicine, too often proprietary in character, into a university department. This evolution,

beginning over thirty years ago, and having in the early days notable manifestations at Harvard under Elliot and at Johns Hopkins under Gilman, is not yet complete. There were heard both in Chicago and, during the previous week, in Boston at the meeting of the Association of American Medical Colleges, pleas for greater freedom, for greater opportunity for the student to develop his own individuality, for closer approximation to true university education.

The point of view has been emerging gradually that medical education is primarily education, and it is the projection of the academic spirit into medical schools that has been the transforming power in these years. The rather summary methods of disposing of the lower grade medical schools that showed little disposition to accept the new dispensation were associated with a determined effort to persist along the lines laid down by thoughtful students of the situation, and resulted in a rigidity of requirement from which another determined effort must be made to set medical education free. The extent to which acceptance of the higher standards prevails today shows remarkable progress in twenty-five years, although few schools now require as much for admission as did the highest at that time.

What are the obstacles to freedom? The most troublesome restrictions are legislative enactments, which sometimes present great difficulty in the way of change. Rules of other governing bodies, though perhaps just as restrictive, may be more easily modified, and it is here that the attack must be made first.

It is clear that the regulations of state boards of licensure and the character of their examinations have an important effect in determining the curriculum of the medical school as well as the required preparation for matriculation in a medical school. But as was pointed out by Metzger, in this mechanism the state board, naturally a conservative body, acts as the balance wheel, while the medical college is the mainspring.

As expressed by Metzger and others, there is a strong tendency to consider exactly what the examination for licensure is to determine, and to limit it to this specific purpose. Thus, it is not to determine adequacy of training in the premedical subjects, nor even in the fundamental medical sciences, except in so far as they may be applied to medicine. It was even suggested that the duties of the state board, in so far as the determination of educational qualifications is concerned, might well be restricted to the careful scrutiny and supervision of the medical school. But according to Metzger's view the state board cannot have much initiative.

The first move must come from the medical school, and here it has been made by introducing certain flexibilities in the curriculum (Pepper, Edsall, and others) and by more formal action on the part of the Association of American Medical Colleges. At the Boston meeting certain definite steps were taken in the direction of liberalization—not much, but a beginning. It is now to be seen what the state boards will do. Judging from the opinion expressed at the Chicago meeting they will meet the medical colleges at least half way.

Billroth said half a century ago that the medical service in rural communities in Germany presented an acute situation, and doubtless there have been periods in this country when there were exacerbations of distress. General attention has been directed to the situation in the United States at the present time by the president of the American Medical Association, and the consensus of trustworthy opinion is that the situation is serious. It is also true that many defects, some economic, can be pointed out in the system of medical education. But Pusey has not shown that there is any correlation between these two phenomena.

Ballley points out that the rural situation is serious from the economic point of view; and Pearl con-

firmed the findings of Mayer and Harrison that the distribution of physicians is determined by economic factors, when they are trying to make a living, rather than by the time and effort the physician has to spend in getting his education. If the per capita wealth of a community goes up one hundred dollars, a new physician moves in; if it goes down one hundred dollars, a physician moves out.

Lyon, whose students investigated for themselves some of the "openings" in Minnesota and adjoining states, said that not all the vacancies as "town without a doctor, fine community" were bona fide, to the bitter disappointment of the young graduate.

In recent years there has been a great increase in the number of hospitals and the preponderance of open over closed hospitals has become more marked annually. The value of the closed hospital, especially in connection with a medical school, was not underestimated, but Goldwater and MacEachern particularly emphasized the educational opportunities of the open hospital. The hospital is important in the professional advancement of every physician. In community hospital organization the need of every physician for the hospital should be a controlling factor; the inferior doctor often needing the hospital influence more than does the better trained physician. There is a widespread hunger for knowledge in the medical profession, and the average of professional ability in the community may be considerably elevated by the hospital influence.

There is a growing sentiment in favor of a single standard of educational requirements for all those who practice the healing art, whatever application of their knowledge they may see fit to make in the treatment of disease. The spirit of the conference in Chicago was one of qualified satisfaction with what has been accomplished in the past twenty-five years, and, with full recognition of the difficulties ahead, of optimism as to still greater gains to be expected in the second quarter of the century.

CHARLES F. PAINTER, *Chairman.*

NO. 2

REPORT OF THE COMMITTEE ON ETHICS AND DISCIPLINE

During the year three meetings of the Committee have been held, namely, in November, February and April, and twenty-three different cases have been considered. We regret to say that Dr. F. W. Anthony of Haverhill felt that he must resign as a member of the committee. His wise counsel, his friendly criticism are missed. The President has appointed, *ad interim*, Dr. W. C. Keith of Brockton to fill the vacancy. At the November meeting a "Form Letter" was sent to a Fellow who had entered a protest in regard to another Fellow who was said to be implicated in a case of abortion. Another Fellow who three years ago had been accused of action incompatible with the Code of Ethics of our Society, a man who had taken no notice of previous letters sent him by the Committee, finally reported that he had been ill and therefore craved indulgence. He was notified that his conduct in future would be scrutinized carefully by the members of the Committee. The facts regarding another Fellow who had been found guilty of advertising in a flagrant manner were brought before the Committee again. He submitted a resignation which was accepted by this Council in February. The case of a Fellow who has been in prison, convicted of a crime involving moral turpitude, was considered at all three meetings. On the recommendation of the President it was voted that decision in his case be deferred until after action has been taken by the Society on the amended Section 8, Chapter I, of the By-Laws. Another Fellow who was in jail offered his resignation and it was accepted by the Council in February.

A complaint was registered with our Committee that one of our Fellows, a surgeon, visited a neigh-

boring city and advertised in the local papers that he was to be in that city to hold clinics on certain dates. This surgeon wrote the Committee asking for advice regarding his conduct in future, as to advertising, and it was given him. Several complaints were presented by individuals as to alleged unethical conduct of fellow members. We believe that all such cases have been adjusted satisfactorily. Two cases having reference to alleged infraction of the narcotic law have been brought to our attention. In one case the court records were obtained and other evidence, and it was voted to take no action. The other case is still pending. The name of a Fellow of the Society appeared on a letterhead of a commercial organization as a member of the firm. A letter written on such a letterhead was sent by the other member of the firm to one of our Fellows, offering to split fees if he would refer cases to the firm, and pointing out the sort of symptoms that might require the goods of this firm. In reply to a "Form Letter" the accused member said he was not responsible for the appearance of his name on the letterhead and regretted that it was there. The committee voted, in accordance with the terms of Section 9, Chapter 1, of the By-Laws, to recommend to the President that this Fellow be admonished as to the future. A "Blanket Complaint" against many members of the Massachusetts Medical Society, chiefly alienists, was received from a lawyer of this state. Inasmuch as we had every reason to believe that this lawyer's mind was unbalanced and from the fact that he had preferred similar charges against some of the same Fellows six years ago, and had failed to appear before the Committee to substantiate the charges, it was voted that no action be taken, except to acknowledge the complaint.

In accordance with a vote of the Council, June 6, 1924, we discussed thoroughly the status of Fellows of the Society who might be connected with the faculties of the Middlesex College of Medicine and Surgery, Cambridge, and the College of Physicians and Surgeons, Boston. Both colleges had refused to have their institutions investigated by the standing Committee on Medical Education and Medical Diplomas, as reported to this Council by the chairman of that Committee, February 4, 1925. We secured a recent catalogue of the College of Physicians and Surgeons. The registrar of the Middlesex College wrote that the recent catalogues of his college were exhausted; that at present no Fellows of the Massachusetts Medical Society were members of their faculty, all having been dropped or had resigned since last June; he sent us a sealed envelope containing the names of their faculty with the request that it be returned to him unopened unless we were willing to assure them that no effort would be made to injure the members of their faculty professionally, to cause their withdrawal from the faculty or to give their names to the American Medical Association or any other body. It seemed wise to your Committee to return the envelope unopened, and this was done. We wrote to the four Fellows who, we believed, were connected with the faculty of the College of Physicians and Surgeons. Three wrote that they had already resigned, and the fourth resigned May 19.

HENRY JACKSON, *Chairman.*

NO. 3

REPORT OF THE COMMITTEE ON STATE AND NATIONAL LEGISLATION

The Legislature of 1924 created a special recess committee to consider the entire problem of registration and to render a report containing recommendations at the next annual session. This report was referred to the Committees on State Administration and Public Health, sitting jointly, and was known as Senate Bill No. 19. Briefly, this bill opposed the

licensing of chiropractors and midwives; required all applicants for registration in medicine to be graduates of medical schools approved by the Board of Registration in Medicine; removed all restrictions so that the Governor could appoint seven physicians on the Board of Registration in Medicine, irrespective of membership in medical societies, and created an unpaid board of men representing different walks in life to act as a superboard in deciding all disputes and appeals concerning registration. If this bill was passed, the conditions governing registration would be somewhat comparable to that of New York State with its Board of Regents.

Your President, Dr. Bigelow, called a meeting of the Joint Committee on State and National Legislation, and invited the Presidents of all the District Societies, the members of the Board of Registration in Medicine and the Secretary of the Friends of Medical Progress to be present, that the various recommendations of the special recess committee might be carefully considered, and definite action decided upon. While not ideal, it was the consensus of opinion of those present that the proposed bill was preferable to the existing conditions, and your Committee voted to support Senate Bill No. 19. Dr. Bigelow appreciated the importance of the radical change and assigned the members of this Committee, as well as certain other physicians, to visit every large city in the Commonwealth that the purpose and importance of the bill might be thoroughly explained to the members of the Society. To our dismay, a miniature War of the Roses resulted and some of our members opposed the passage of the bill, evidently dreading the power to be given to the superboard. The members of the Legislature, confused by the differences of opinion among the physicians, and also influenced by the strong opposition of the Class C medical schools and the cultists, had the bill rewritten. Senate Bill 378 provided that one member of the Board of Registration in Medicine must be an osteopath. Your Committee opposed this bill as it favored class legislation. We felt that the Governor could appoint an osteopath if such a man possessed the necessary qualifications, but objected to a clause specifying that one member should be an osteopath. This bill was referred to the next annual session. Senate Bill 379 provided for the consolidation of certain boards of registration under an unpaid board of seven persons. In the rewriting of this bill the clause requiring that all applicants for registration must be graduates of medical schools approved by the Board of Registration in Medicine was omitted. This omission changed the entire purpose of the bill, and your Committee appeared in opposition to it. The bill was defeated except the clause governing embalmers. The other recommendations of Senate 19 were referred to the next annual session.

The petition of Dr. Samuel B. Woodward, relative to the vaccination of certain children in private schools, was supported by federal, state and municipal health officials, as well as by the Chamber of Commerce, the Friends of Medical Progress and private citizens. We regret that this bill did not pass. The bill opposing vaccination in public schools was also defeated.

A bill, Senate 415, to assist small towns in acquiring a resident physician, was passed. This bill provides, in four sections, for the employment of a physician in various capacities by towns not exceeding three thousand inhabitants which vote to accept any or all of the sections. In Section 1 an appropriation of five hundred dollars for free residence quarters for a school physician was authorized. In Section 2 the Selectmen, who act as overseers of the poor, may appoint the school physician to be their agent. In Section 3 the Selectmen, acting as a board of health, may appoint the school physician to be inspector of health. In Section 4 the Selectmen may appoint the school physician to be the town physician.

The cultists were extremely active, the osteopaths asking for the establishing of a board for registration and regulation of the practice of osteopathy, and the chiropractors that the laws be changed so that they might be permitted to practice in this state. These bills were defeated. In a single year in the state of New Jersey about 560 chiropractors were permitted to practice.

A bill to establish a division of preventive medicine, and a state fund for paying benefits to contributors in cases of sickness, accident or death was opposed by your Committee, and was referred to the next annual session.

A bill providing for the protection of mothers and children during the maternity period was granted leave to withdraw.

A résumé shows that while no legislation was passed in opposition to the best interests of scientific medicine, yet nothing constructive was accomplished. The Society should appreciate the opposition presented at the legislative hearings. The cultists and the Medical Liberty League are wealthy, well-organized societies, supplied with the best of legal talent, publicity agents and efficient lobbyists. The legislators are well supplied with pamphlets and personal interviews so that they are familiar with one side of the question before it reaches the committees. When six hundred persons appear at a hearing favoring chiropractors, and their arguments are presented to the committee by two attorneys, and your Society is represented by a single physician in opposition to the bill, it is not difficult to imagine the natural inclinations of the politicians who are to render a decision on the bill.

We give much time, without thought of remuneration, to hospital and private charitable work. Are we not overlooking our duties to the general public and to the younger members of our profession by avoiding civic and professional obligations? Our carelessness and lack of interest in important legislative matters make possible the existence of the cultists and their kind.

Dr. Bigelow and the members of this Committee welcome the opportunity of expressing their appreciation of the great personal and financial sacrifices made by such members as Walter P. Bowers, Samuel B. Woodward, Charles F. Painter, Charles E. Mongan and Ayres P. Merrill in rendering valuable assistance in connection with legislative matters during the past year.

THOMAS J. O'BRIEN, *Secretary*.

NO. 4

REPORT OF THE COMMITTEE ON PUBLIC HEALTH

During the year the Committee on Public Health has, as usual, held regular monthly meetings.

For several years it had been the practice of the Committee to provide, on request, speakers on public health subjects at meetings of the District Societies, and from time to time also for other medical meetings. Fellows of the Society were solicited to give their time and services for this purpose and the list of speakers thus obtained was announced from time to time in the *Journal*. About six months ago the Committee decided to discontinue this practice of advertising a special list of speakers on public health subjects. The demand from the District Societies or other medical bodies was not great. Moreover, the existence of such a special list seemed to be tending to embarrassing requests for speakers for non-medical audiences.

In effort to keep the members of the Committee informed with respect to public health topics which were receiving newspaper publicity, the Committee subscribed for newspaper clippings from a clipping bureau. The experiment resulted in little information which was not coming to the attention of the

Committee in other ways and the subscription was discontinued after three months' trial.

As one of the public health activities of the Massachusetts Medical Society its relations with the Massachusetts Central Health Council might, it would seem, be appropriately recorded in this report. The Society is now represented in the Council by Dr. John W. Bartol and by the chairman of the Committee on Public Health. The Massachusetts Central Health Council is a voluntary association in which are represented the American Red Cross, the American Society for Control of Cancer, the Massachusetts Association of Boards of Health, the Massachusetts Association of Directors of Public Health Nursing, the Massachusetts Department of Public Health, the Massachusetts Dental Society, the Massachusetts Medical Society, the Massachusetts Society for Mental Hygiene, the Massachusetts Tuberculosis League, and the Massachusetts Veterinary Medical Association. To be eligible to representation in the Massachusetts Central Health Council, under the provisions of its constitution, an organization must be engaged in public health work state-wide in its scope. The objects of the Council are stated to be:

DUTIES OF THE CENTRAL HEALTH COUNCIL

The duties of the Central Health Council shall be as follows:

To make such studies as may be deemed advisable of various successful or unsuccessful attempts in other states or other parts of the world to meet health or social welfare problems more effectively or more economically, and to compile the results of these studies in such form as to be available for the information of organizations represented on the Council.

To formulate from time to time and to recommend for the consideration of the constituent organizations plans for the better coordination of the work of health or of social welfare organizations in the state of Massachusetts.

To investigate on request of any constituent organization any specifically designated health or social welfare problem and to make such recommendation with reference thereto as may seem desirable.

To invite any or all state-wide organizations interested in public health work to present their programs to the Council and to study such programs and to make such suggestions or recommendations to the organizations concerned as may seem best calculated to eliminate overlapping or duplication of work.

To keep advised and to keep the constituent organizations advised of proposed legislation of possible interest to any of these organizations, and to make such recommendations with reference thereto as may seem advisable.

To draft such proposed legislation as may seem necessary or advisable to promote the purposes for which the constituent organizations exist and with the approval of two-thirds of the members of the Council to take such measures as may seem advisable to secure the enactment of such legislation.

To represent the constituent organizations at legislative hearings whether with or without the specific request of any constituent organization and whether in favor of or in opposition to any proposed legislation.

Regular bi-monthly meetings of the Council are held and are remarkably well attended. Various public health subjects are discussed at the meeting. Proposed legislation affecting public health matters has also been considered. No notable special work has as yet been undertaken by the Council, but it has certainly served to promote a better understanding of public health problems among the organizations represented.

CONTROL OF COMMUNICABLE DISEASES

The investigation which your Committee on Public Health began over a year ago with reference to the

efficacy of conventional measures for the control of common communicable diseases was recently completed. Dr. Edward G. Huber, employed by the Committee, has embodied the results of the investigation in a typewritten manuscript with numerous charts, which is herewith submitted to the Council for such action with respect to publication as may seem appropriate. Dr. Huber has gone into the subject with a clear-headed thoroughness which makes his presentation of the results of the investigation both more complete and more reliable than anything yet attempted in the same field by any agency. This work is distinctly creditable to the Society as a contribution to better knowledge of a public health problem, and your Committee hopes that it may be found practicable to publish it in full.

MANUAL FOR HEALTH EXAMINATIONS

As a work for the present year your Committee has undertaken the preparation of a manual which might serve as a really practical guide and aid to the average practitioner when called on to make one of the much talked about periodic health examinations. The preparation of this manual has been undertaken by the Committee with knowledge of what has been done or undertaken by others with the same object in view. It has seemed desirable to complete the manual as soon as possible, and Dr. Joseph Garland, who has been engaged since last December in its preparation, under the general direction of members of the Committee, has succeeded in finishing the work so the Committee is able to submit it to the Council today for such action as may seem advisable.

VICTOR SAFFORD, *Chairman.*

NO. 5

REPORT OF THE COMMITTEE ON PUBLIC INSTRUCTION

During the year this Committee has placed a few articles on health matters in the lay press, but finds this an impracticable method of attack at present, and now feels that we will accomplish more by assisting a Committee on Public Instruction in each District in organizing local campaigns of health education. A start has been made in this direction, and the Committee requests your cooperation through your District Societies.

COMMERCIAL HEALTH EXAMINATIONS

Report of a Study by the Committee on Public Instruction

At the October meeting of the Council the delegates from the Massachusetts Medical Society to the annual meeting of the House of Delegates of the American Medical Association reported that the Judicial Council of that body had drawn attention to several so-called commercial organizations throughout the country which were asking the doctors to make a physical examination for a small fee and selling that report to their clients for a much larger fee. This our delegates felt was a very important matter, and hoped the Judicial Council would take some action about it, but their report was filed with no definite action being taken.

At the February meeting of the Council of the Massachusetts Medical Society, Dr. J. Forrest Burnham, one of the delegates to the national association, offered the following motion, which was adopted by the Council:

Moved, That the Committee on Public Instruction be requested to consider the subject matter of the two resolutions adopted by the House of Delegates of the American Medical Association in committee of the whole, June, 1924, referring to the supplementary report of the Judicial Council in relation to periodic health examina-

tions by the family physician and report at the next meeting of the Council, and that this committee confer with the management of the *Boston Medical and Surgical Journal* regarding proper publicity meanwhile.

The Committee on Public Instruction corresponded with the sources of information they knew of, and then held a hearing, to which were invited the delegates to the House of Delegates of the American Medical Association, such other members of the Society as we had reason to believe might be interested, and delegates from the organizations under investigation. At the meeting Dr. Burnham and Dr. Morgan represented the delegates, and Doctor Fisk and Mr. Green represented the Life Extension Institute.

Dr. Burnham made a most excellent and comprehensive statement of his reasons for asking for action by the Council. He highly commended the report of our Committee on periodic health examinations, analyzed the record cards they prepared, made several suggestions as to improvements, and suggested that the *Journal* should send samples of the cards to all physicians of the state and urge the general adoption of them. Then, quoting the original resolution, he stated: "Ever since I have been a member of the medical profession it has been called to my attention that there are constantly arising organizations of laymen who are striving to separate the family physician from his practice; trying to reduce the income of the general practitioner and declaring dividends for themselves." As examples he discussed lodge practice; how insurance companies reduced the fee for ordinary physical examinations and were later forced to increase it; the quarrel concerning the Industrial Compensation Act; and the recent report of the American Medical Association of their investigation of several commercial laboratories and low grade hospitals. Dr. Burnham then read the report of the Judicial Council of the national society and felt that the gist of the matter was in the first line—

"Shall the Medical Profession sell directly to the consumer, or through the middle man?"

The doctor asserted this is not a case of the public versus the good of the profession, but is a case in which the public can best be served only by what is best for the profession. Reading excerpts from typewritten and printed matter concerning the Life Extension Institute, he asked the Committee to consider the following quotations, viz.: "It must be conceded that we are giving a powerful influence to the general practitioner," and "There is such a revolution taking place in the practice of medicine that it is necessary for the physicians to readjust themselves to the new order of things." He also asks the Committee to investigate the statement that 39 insurance companies pay \$5 for information concerning their policyholders; and that corporations, business firms and others may likewise apply at the home office for information about their employees; these statements having been denied by the company. Dr. Burnham questions whether or not we are giving this matter of Periodic Health Examinations too much weight, suggesting it would often be injurious to the patient, although he concedes they may be all right as a general thing. He feels the giving of advice as to diet, exercise and hygienic measures constitutes the practice of medicine and is apt to drift into the treatment of sickness. In criticising the statement that one of these institutions claims to be semi-philanthropic he cited an instance to prove that this is the wrong way to give philanthropy, and said, "If help is needed, it is the poor, struggling general practitioner who needs it." He suggested that the Committee might obtain a large amount of data on this subject from the Judicial Council, but on application to them they had received only a statement of their former report, a vigorous disclaimer of any animosity, and a quotation from the *British*

Medical Journal which suggests that a physician would risk his reputation by making examinations for the Life Extension Institute.

In summing up, Dr. Burnham made the following points: (1) The fee paid for the examination is too small. (2) Some of these companies require only two tablespoonfuls of urine for an examination. (3) They separate the family doctor from his family, in general cases. (4) In regard to industrial work, some companies send their own doctors to do the work instead of employing the local doctors. (5) Polk's Directory was the best of its kind until the American Medical Association made a better one, then Polk withdrew and he suggested similar action by the commercial companies doing these examinations.

Dr. Mongan felt that any organization working for gain and profit in making health examinations would soon begin furnishing medical service to medical cases. He urged the study of the Bulletin of the American Medical Association, expressed his disapproval of the membership of the reference board of one of these companies, questioned why members of the House of Delegates of the national society allowed the use of their names on that reference board, and felt we should stand by the delegates, by Billings, Haggard, Thayer, and the men from the Middle West.

Dr. Fisk, medical director of the Life Extension Institute of New York City, then presented the Committee with a mass of literature explaining the attitude of the Institute. He asks that their work be considered as Periodic Health Examination Service and explained that the examinations cost them more than five dollars, as they do the urine examinations, the clerical work, the actuarial work, the advertising, and spend some money on philanthropy. He claims all the real medical work is done by medical men, that they employ over eight thousand doctors, throughout the country, to make the examinations, and several in their offices to correlate the reports of the examiners and make the final report to the client; they have paid over one million dollars to the doctors of the country for examinations, and they wish to act only as intermediaries between patient and doctor—that is, to induce people to have a thorough examination by a well-qualified examiner and get the habit of doing this regularly. Thirty-nine life insurance companies have made contracts with the Institute to examine their policyholders at regular intervals; the reports of these examinations are sent to the policyholders but not to the insurance companies. In answer to questions from Dr. Bowers about the examination of the urine at the home office,

he explained it was all done there in the hope of standardizing the work, but that there might be call for modification in the method and he would be glad to receive suggestions as to changes. Their examiners are instructed not to take the applicants as patients but to send them to their family physician in case special treatment is called for.

From various sources your Committee have gleaned the following: Although no organization was named, it appears from evidence and arguments presented by Dr. Burnham, Dr. Mongan, and the records of the House of Delegates of the American Medical Association that the criticisms are directed especially against the Life Extension Institute. Systematic periodic health examinations on a large scale were originated by the Life Extension Institute about thirteen years ago, and have been extensively advertised to the public by that organization ever since; several life insurance companies have found periodic health examinations of valuable assistance in reducing morbidity and mortality; certain industrial organizations find it convenient to arrange in this way with an organization for the examination of all their employees, whereas they would not consider doing such work with individual doctors, even though the same doctors may be employed by the Institute to do this work; some members of our profession may not as yet be ready to take on this work, and may even discourage the applicant from having any sort of examination; and that the history of such movements indicates that as soon as the doctors are fully prepared to take on the work, the commercial organizations will be pushed into their proper relations with the public and the profession.

The committee recently appointed by the President of the Massachusetts Medical Society to report on health examinations strongly advocated health examinations performed by the general practitioner. With this view this Committee concurs. Furthermore your Committee does not believe that it is good medical practice for physicians to give opinions without seeing the patient. It is this Committee's conviction that the examining physician, after collecting all necessary laboratory and other data, is the one who should deliver the opinion to the patient. Thus it believes that the general practitioner who takes care of the patient in illness is the desirable physician to carry out health examinations.

Your Committee recommends that the Society direct all its efforts in this matter to educating the public as to the value of periodic health examinations, and the physicians as to the psychology involved and the methods of making and recording such examinations.

A. P. MERRILL, *Chairman.*

ORIGINAL ARTICLES

SOME UNUSUAL CASES OF ACUTE APPENDICITIS*

BY SAMUEL G. PAVLO, M. D.

Surgeon to the Malden Hospital

Assistant Surgeon to the Urological Dept. of the Boston Dispensary

It is comparatively simple to diagnose an ordinary case of acute appendicitis. The acute onset, pain all over the abdomen which gradually settles in the right lower quadrant, vomiting, tenderness, and muscular spasm over McBurney's point, some elevation of temperature,

rather rapid and full pulse, with a leucocytosis and a negative urine, is a simple picture of the usual case of appendicitis.

It is interesting to note that already Hippocrates¹ knew the clinical entity of what we call now acute appendicitis. His remarkable aphorisms that suppuration upon a protracted pain of the part about the bowel is bad, and that from

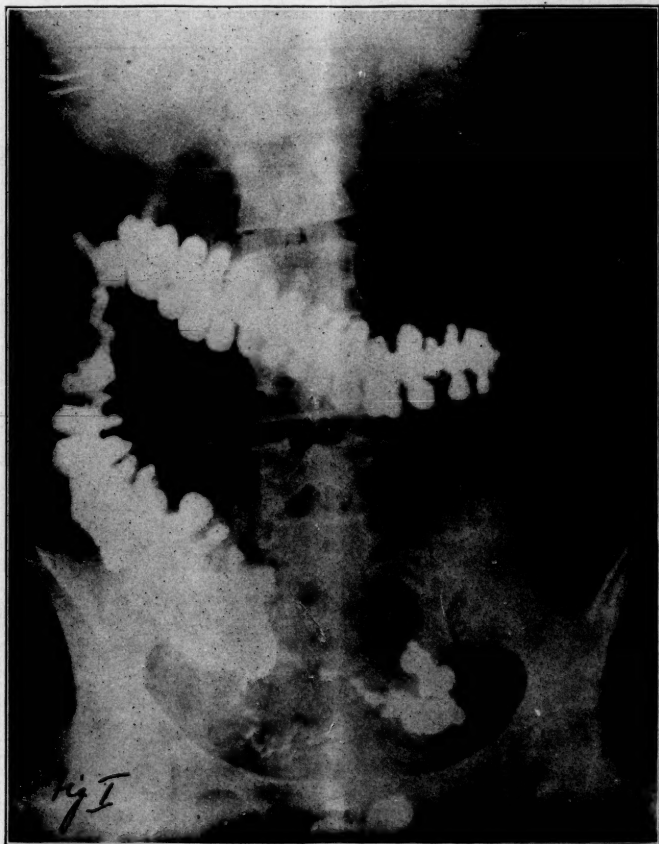
*Read at the March meeting of the Greater Boston Medical Society, Boston Medical Library.

the rupture of an internal abscess prostration of strength, vomiting, and "deliquium animi" results, are very characteristic.

However, owing to increased resistance of the human body to infections, and a different mode of living of man at the time of the Father of Medicine, cases of appendicitis were rare and

fiction. This fact is important to remember in dealing with a surgical abdomen, since the diagnosis of acute appendicitis may be masked, owing to the malposition of the appendix, and thus the physician will be tricked to a wrong diagnosis which may be fatal to the patient.

I am sure that every one of you has met in



many subsided without the "deliquium animi." In this sense, I believe the great surgeon of Rochester² to be right in calling appendicitis a disease of modern life.

Reginald Fritz³, as early as 1886, in his classic description of appendicitis, has already taught us that the symptoms of appendicitis may vary with the place the appendix occupies in the abdominal cavity; and John B. Murphy⁴ remarked in his characteristic way that the direction taken by the appendix is so variable as to defy classi-

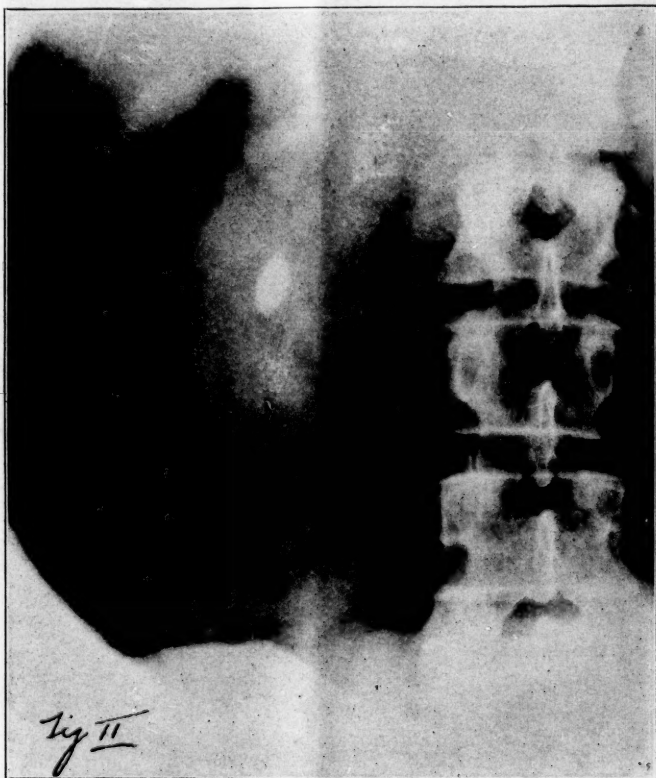
fication. This fact is important to remember in dealing with a surgical abdomen, since the diagnosis of acute appendicitis may be masked, owing to the malposition of the appendix, and thus the physician will be tricked to a wrong diagnosis which may be fatal to the patient.

Case 1: A Technology student of 22 was suddenly seized with pain in the lower mid-abdomen. He was always well and was attending school until this A. M. He thought he "caught cold" in the bladder, especially so because later

in the day he began to have pain on micturition and there was a frequent desire to empty the bladder. He tried home remedies, applied a hot bag to the abdomen, and a soap-suds enema. And having obtained no relief, a physician was called, who, next morning, sent the patient to the Malden Hospital to my service with the diagnosis of acute cystitis. The patient was seen by me on admission, and on examination there was

corpuscles does not exclude appendicitis, as shown by Harbin⁷, who in a review of 500 laparotomies, found that albumin appeared in 57% cases of acute appendicitis, pus appeared in 30% and red cells in 10%.

The diagnosis of acute appendicitis was made and I operated upon the patient immediately. On opening the abdomen by a right lower rectus incision, I found a gangrenous appendix, the



definite tenderness and muscular spasm over the region of the urinary bladder; there was also some spasm and tenderness over McBurney's point. His temperature was 99.2; his pulse 106; leucocyte count 14,000. The urine showed some leucocytes, and an occasional erythrocyte.

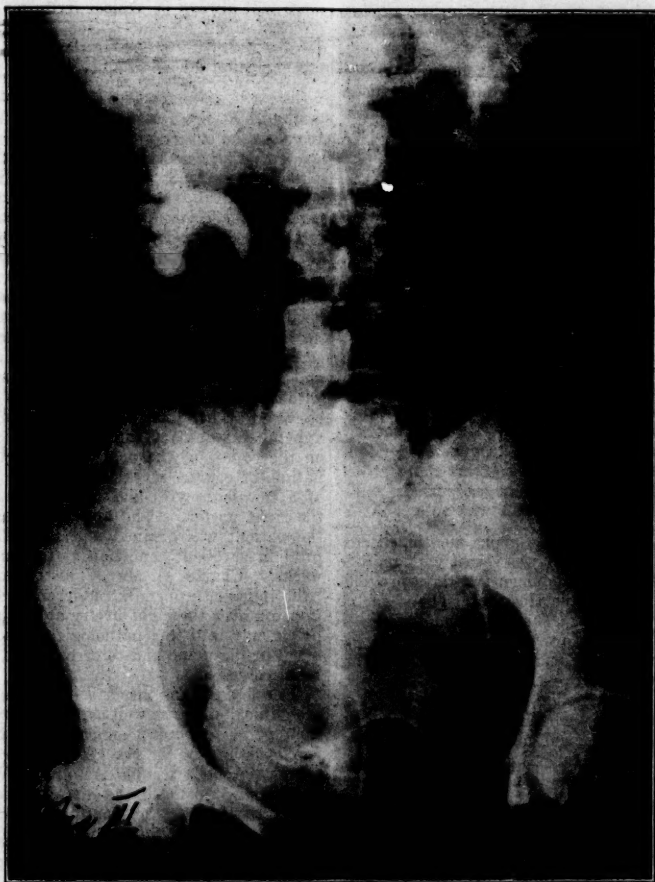
Morton⁸, Caulk⁹ and others have underlined that one of the cardinal and constant symptoms of cystitis is a cloudy urine, which was absent in this case. The leucocyte count, the tenderness over McBurney's and the late appearance of urinary symptoms are rather characteristic of a low appendix. The presence of pus and blood

tip of which was buried into the urinary bladder so that, in spite of my gentle separation of the tip of the appendix from the bladder, there was considerable leakage of urine from the perforated area of the bladder into the abdominal wound. The bladder was closed, and the appendix was removed in the usual way. Two cigarette drains were inserted and the patient made an uneventful recovery. He left the hospital sixteen days after admission.

Caulk⁹ relates of a case on record where a pin uniting the appendix with the bladder produced severe cystitis. Joseph McCarthy¹⁰ dem-

onstrated X-Ray plates of a swallowed hair pin piercing through the sigmoid and the bladder, and Dr. Woodruff of New York¹⁰ related a case where a cigarette drain left after a pelvic operation was removed by him from the bladder several months after the operation, the only symptoms being those of cystitis.

Case 2: A laborer of 64, of alcoholic habits, was seized with pain in the region of the upper right quadrant two days before admission to the Hospital. Pain gradually extended throughout the abdomen. Patient vomited several times, but there was no fecal vomitus and bowels moved with enemata. He was treated for a gall blad-



Occasionally the appendix points upward, simulating symptoms of gall bladder disease: and Deaver¹¹ is quite right in saying that it is next to impossible to make a clinical diagnosis. However, as the Mayo Brothers¹² and Deaver¹³ (in another place) point out, in gall bladder disease, there is usually a previous history of gall stone colic and digestive disturbances, while in acute appendicitis there is no such history. To illustrate this condition I wish to cite.

der attack with sedatives, and finally sent to the Malden Hospital, where I saw him on my service. He gave a history of being always well, never had any digestive disturbances. On examination, his whole abdomen was very rigid, especially so over the region of the gall bladder. Diagnosis of a ruptured gall bladder was made and I operated on him very shortly after admission, opening the abdomen by means of a high right rectus incision. There was considerable

free fluid in the abdominal cavity, the peritoneum was injected and the appendix, which was gangrenous and ruptured, was adherent to the gall bladder. The appendix was removed in the usual way, two drains inserted into the wound; patient stood the operation well, but his kidneys went bad later on, and he died on the eighth day after the operation.

That occasionally in operating on the uterine adnexa, the appendix is found adherent to an ovary, tube or both, is common knowledge; but it is also well known that sometimes it is pretty hard to tell in a low appendix whether one is dealing with an acute appendix, which should be operated upon immediately, or an acute salpingitis, which may subside after a short course of treatment and certainly should not be operated upon presently. In these cases, Murphy¹⁴ believes that the history is significant inasmuch that in diseases of the adnexa, there is a history of chronic suffering, except in the acute cases of post abortive or postpartum sepsis and acute gonorrheal vaginal infection. As for physical examination, Graves¹⁵ underlines the rigidity being on both sides, and in the majority of cases, there are distinct masses in the adnexa in cases of infection of the latter. If the appendix implicates a tube, there is usually tenderness higher than if there is only salpingitis. The subsequent history is also characteristic in that salpingitis has little tendency to general peritonitis and the local symptoms of an acute attack extend over considerably longer periods, while in appendicitis the reverse is the rule.

Case 3: Illustrates the above mentioned condition. A woman of 41 was seized with pain in extreme right lower abdomen two days previous to her admission to the Hospital. There was no fever nor vomiting. There was no tenderness nor muscular spasm over McBurney's point. Patient was regular in menstruation, did not skip any, and expected it in a day or two. There was no history of any pelvic trouble, no leucorrhea, and no urinary disturbances. Vaginal examination revealed a normal uterus in normal position and the right tube and ovary were tender, but not enlarged. The left tube and ovary were not tender. The diagnosis of acute appendicitis was made. Patient, however, refused operation, and so ice was applied to lower abdomen, which gave her some relief. On the next day her temperature rose to 99.8; pulse 110; there was more spasm which extended higher up and patient vomited twice. Patient still refused operation, until the next day when she became considerably worse and was taken on a stretcher to the Hospital. Patient began to menstruate a few hours before admission. I operated on her immediately, opening the abdomen by means of right lower rectus incision. The appendix was found to be badly inflamed and gangrenous, the tip was adherent to the right ovary and there was a beginning of a formation of appendiceal abscess.

The appendix was removed in the usual way and a large cigarette drain inserted. She stood the operation well. The convalescence was rather stormy for the first four days, but she left the Hospital in excellent condition on the twenty-second day after admission.

Dr. Deaver¹⁶ says "that where the acute appendix is in intimate relation with the ureter, there will always be vesical irritation and pain referred along the line of the ureter, with tenderness over the entire ureter." To illustrate this condition I wish to cite

Case 4: A woman of 32 was seized with pain in the right lower abdomen, radiating up and down in the course of the ureter. She vomited a few times, passed her urine rather frequently, with pain; had no temperature, and moved her bowels naturally the same morning. She was taken to the Hospital, where I cystoscoped her, catheterized both ureters, and did pyelograms. While I did my utmost in studying her, to arrive at a proper diagnosis, the appendix was causing all the damage in the patient's abdomen. I noticed her temperature rising, and a mass appearing at McBurney's point, which rapidly became larger. Her leucocyte count was 24,000 and she was a sick woman. That I was dealing with an acute appendix was quite obvious. I operated on her immediately, and found a large appendiceal abscess, the mass practically lying on the course of the ureter. Urological examination, of course, revealed no pathology outside of a few leucocytes and blood corpuscles from the right ureter. The appendix was removed, the patient was drained and she left the Hospital in excellent condition at the end of three weeks. Charles H. Mayo¹⁷ justly remarks that "the inflamed appendix adherent to the peritoneum over the right ureter at the brim of the pelvis may lead to a pathological condition with blood in the urine and to erroneous diagnosis of renal disease."

Occasionally one meets a condition where all the clinical signs, as well as the X-Ray examination, point to a pathological appendix, but on further study of the case, some other real cause to the patient's trouble is found. Woe to the patient and doctor if the discovery is made too late! To illustrate this condition, I will cite

Case 5: A woman of 42 for the last couple of years had attacks of pain and tenderness at McBurney's, which was not referred anywhere, with vomiting and all the other symptoms of acute appendicitis; she had no disturbances of menstruation, and no urinary disturbances of any kind. Her attacks would last for about a day or two and then would subside after treatment, and the patient would then wait for another attack. She had been to a number of physicians who advised to have her appendix removed. On X-Ray examination, the prints of which I present here (Figs. I, II, III), the diagnosis of retrocaecal appendix was made, but for-

tunately for the patient, plates of her kidneys and gall bladder were taken and a stone in the pelvis of the right kidney was detected. I cystoscoped and pyelographed her to verify that the shadow was really in the kidney. The catheterized specimen from both kidneys showed a normal urine, there was no pus, nor blood. Pelviolithotomy was done, a large stone, about $\frac{3}{4}$ of an inch in diameter, was removed. The patient made an excellent recovery; the retrocaecal appendix does not give the woman a particle of trouble.

Hugh Cabot¹⁸ informs us that out of 157 cases of renal and ureteral calculi collected at the M. G. H., "26 abdominal operations had been done elsewhere under a mistaken diagnosis and without benefit." It is worth while noticing that all my patient's pain and tenderness was well localized in the right lower quadrant and that at no time did the urinalysis show any pathology. Cabot found that in his series, the urine was entirely and persistently normal in 14% and that pain localized in the right lower quadrant was a symptom in 19% of the cases who had any pain at all as a symptom. Thus the absence of urinary findings and pain in the right lower quadrant does not exclude a renal calculus.

Case 6: This case may illustrate a somewhat similar condition. A little girl of five years was seized with pain and tenderness in the right lower quadrant. Temperature 103; pulse 150, with a leucocyte count of 18,000. She was drowsy for two days before the onset. Was seen by a good children's man who sent her in to my service with the diagnosis of appendicitis. The physical examination was about the same as above mentioned. However, the spasm was not constant. The urine was negative. The patient was given pot. citrate, gr. 10, and sod. bicarb., gr. 15, every four hours with forced fluid, and her temperature came down in thirty-six hours to normal. On the second day after admission to the Hospital, the patient's urine was loaded with pus and colon bacilli. Thus the case was one of pyelitis and not appendicitis. One should bear in mind that in pyelitis pus may appear in the urine several days after the onset of the disease.

It is well to remember Keyes¹⁹ remarks that "the more acute inflammation, the less likely is there to be pus in the urine and that fulminating cases of acute renal infection are characterized by almost complete absence of any symptoms suggesting the location of the infection in the urinary tract. Urinalysis suggests nothing in the very large minority of cases." In this particular case the history of drowsiness is rather characteristic according to Herman²⁰.

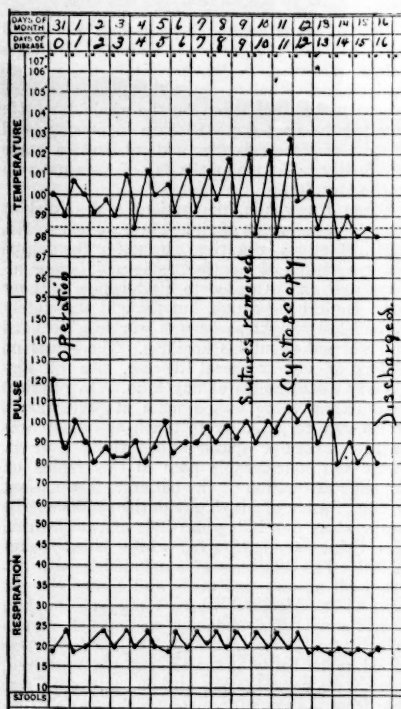
Dr. Duggan²¹ in his very interesting article on "Progress of Acute Appendicitis at the B. C. H.," writes that tumor with increasing pain and tenderness, with a rise of temperature and pulse rate is almost diagnostic of abscess. This reason

is why in Case 4 I did not hesitate to operate on the woman immediately, but you notice that Dr. Duggan used the words, "almost diagnostic," since a tumor may not always be an appendiceal abscess. To illustrate this statement I wish to refer to the seventh and last case.

Case 7: A salesman, 21 years old, was seized with pain in the right lower abdomen two days before admission to the Hospital; he went to business, nevertheless, and although he felt very miserable, he stuck it out for the whole day. He vomited the next day, the pain increasing, and in spite of home remedies, patient became worse and finally called me on the day of his admission to the Hospital.

When I saw him, the patient complained of pain and tenderness of right lower abdomen. His past history was negative, except for the grippe about a couple of months previous. He was always well and attended to his business without fail. He did not cough, but thought that lately he had lost weight as he was working too hard and worried about his business. There was no history of any venereal disease, nor of any urinary disturbances of any kind. On physical examination there was a mass at McBurney's which was very tender to touch and there was definite muscular spasm and rigidity over it. There was considerable pain in this region on the slightest motion of the patient. The patient favored flexion of his thighs to the abdomen. His temperature was 100; pulse 120; and respiration 18. Urine was negative, white blood count 22,000. The diagnosis of appendicitis with appendiceal abscess was made and I sent the patient to the Hospital where I operated on him immediately. The abdomen was opened with a right rectus lower incision. The appendix was found to be badly inflamed, but not ruptured, there were no adhesions and the appendix was free from the expected mass which was felt previous to the operation. There certainly was no abscess. On further examination, the mass was retroperitoneally in the region of the third lumbar vertebra, semi-circular in shape, not very hard to touch, not fluctuating, immovable and having a pedicle attached to it. It was evidently a kidney. The liver and gall bladder were normal. The appendix was removed in the usual way, and the abdomen was closed tight without a drain. Patient stood the operation well, but kept on running a septic temperature. His leucocyte count on the fifth day after the operation was 26,000, with an afternoon temperature of 101.4. The abdomen was soft, the tumor was still there. Bowels moved daily, and patient was hungry, asking for more food, although he was on a soft diet. However, he looked septic. The general physical examination was absolutely negative; he had no pain nor tenderness in any part of the body, except over the mass on the right side. On the ninth day, he had a temperature of 102, pulse 100, leucocyte count of 20,000.

The accompanying chart shows the patient's temperature. Sutures were removed, wound healed, abdomen soft, and the tumor was still there. The patient looked decidedly bad, septic. Urine, negative. X-Ray examination by an ex-



cellent X-Ray man gave the following report: "Kidneys seem in normal position. X-Ray does not give any evidence as to the nature of the mass. If a definite diagnosis is not made clinically, I would advise further plates of his chest, there are shadows seen in the right lung which might represent metastatic sarcoma coming from a possible retroperitoneal sarcoma." The next day the patient was seen on consultation by a well known Boston surgeon who thought the tumor to be a retroperitoneal abscess and advised to poultice it for two days and then operate on it.

I thought that the only way to settle the question about the mass was to do a pyelogram on the patient, and in spite of the fact that the patient was very weak, he was pyelographed, (Fig. IV) on the twelfth day after the operation. The X-Ray report is as follows: "Low and rotated right kidney; the character of the left pelvis shadow suggests left hydronephrosis. The

lungs seem now to be essentially clear." Thus the tumor was a low kidney. On catheterization of the ureters it was found that the urine from the right dystopic kidney was normal, and the secretion was more abundant than from the left. The left kidney which was normally placed was secreting slowly, the urine from it being very cloudy and on microscopic examination there was considerable pus in the collected urine. The patient's temperature gradually came down to normal, although he had pus in the urine for a considerable time. The ureteral catheter, when inserted into the pelvis of the left kidney, apparently started the drainage of an infected hydronephrosis, and thus relieved the condition of sepsis, which was gradually killing the patient by a systemic absorption.

The diagnosis of the case was evidently a right dystopic kidney, acute appendicitis, with a secondary infection of a hydronephrosis on the left side. The establishment of drainage from the left kidney put the patient on his feet very shortly. He gained 22 pounds in 3 weeks and returned back to work very soon. Had I operated on the dystopic kidney as advised, I would have killed the boy.

As pointed out by Quimby²², it is a well known fact that anomalies, especially those of G. U. apparatus, are frequently multiple, and so the hydronephrosis was apparently caused by an aberrant vessel in the left side, obstructing the left ureter intermittently. The infection of hydronephrosed kidney was evidently secondary to acute appendicitis, the appendix acting as a source of focal infection which is quite frequent as stated by Mayo²³. The pain and tenderness of the right, dystopic kidney, according to Barney²⁴, Cunningham²⁵, Lewis²⁶, Chute²⁷, and others, is due in these cases to compensatory hypertrophy of the well kidney and stretching of its capsule, owing to the decreased labor of the diseased one. The septic condition of the patient was due to absorption of toxins as a result of septic retention, which sometimes may be so severe as to cause postrenal anuria as explained in an admirable paper by Caulk²⁸. The improved condition of the patient was entirely due to the establishment of drainage through the ureteral catheter.

CONCLUSIONS

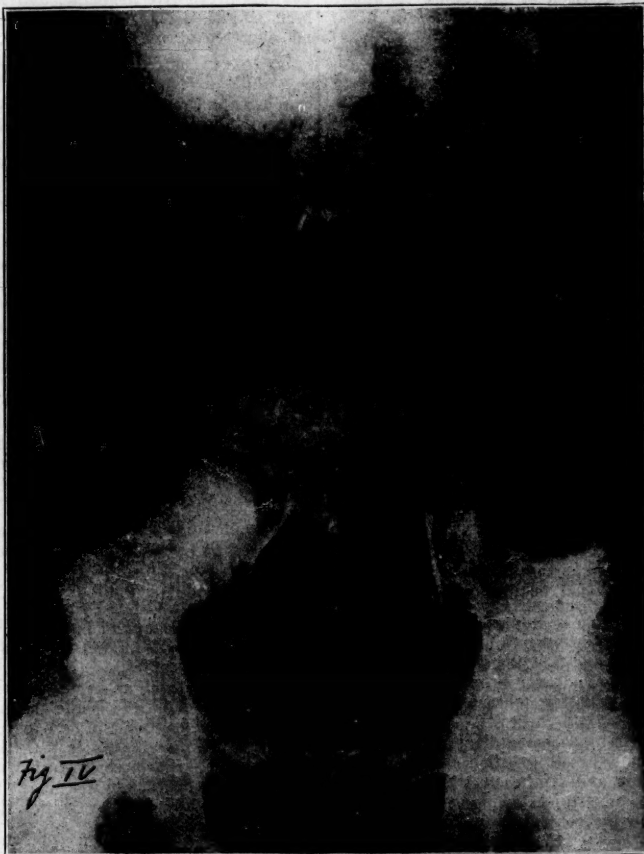
1. In dealing with a pathological abdomen, one should not forget the appendix, especially when a group of symptoms and the history of the case do not suggest a definite clinical entity.
2. After excluding the appendix, one should think of the kidneys as a "silent" cause of the trouble.
3. One should never be misled by the absence of urinary findings, since many a severe renal pathological condition has presented nothing on urinalysis.

4. Localized pain and tenderness in renal conditions sometimes have very little significance and are often misleading.

REFERENCES

- 1 Hippocrates: From "Appendicitis," by John B. Deaver.
- 2 Mayo: Jour. A. M. A., Aug. 23, 1924.

- 11 Deaver: Boston Med. and Surg. Jour., Oct. 30, 1924.
- 12 Mayo Brothers: Keen's Surgery, Vol. III.
- 13 Deaver: Appendicitis: Its Diagnosis and Treatment.
- 14 Murphy: Keen's Surgery, Vol. IV.
- 15 Graves: Gynecology, 2nd edition.
- 16 Deaver: Boston Med. and Surg. Jour., Mar. 5, 1925.
- 17 Charles H. Mayo: Jour. A. M. A., Aug. 23, 1924.
- 18 Hugh Cabot: Jour. A. M. A., Oct. 9, 1915.
- 19 Keyes: Cabot's Modern Urology.



- 3 Reginald Fritz: From John B. Murphy, Keen's Surgery, Vol. IV, Chap. LXIII.
- 4 Murphy: Typhilitis. Keen's Surgery, Vol. IV.
- 5 Morton: Genito-Urinary Diseases and Syphilis.
- 6 Caulk: Cabot's Modern Urology.
- 7 Harbin: Surg. Gyn. and Obst., Feb., 1925.
- 8 Caulk: Cabot's Modern Urology, Vol. II.
- 9 Joseph McCarthy: Transactions of Am. Urol. Assn., 1924.
- 10 Woodruff: Personal communication.

- 20 Herman: Jour. of Urology, Vol. XIII, No. 3.
- 21 Duggan: Boston Med. and Surg. Jour., Feb. 5, 1925.
- 22 Quimby: Boston Med. and Surg. Jour., Mar. 12, 1925.
- 23 Mayo: Jour. A. M. A., Aug. 23, 1924.
- 24 Barney: Boston Med. and Surg. Jour., May 3, 1923.
- 25 Cunningham: Boston Med. and Surg. Jour., May 3, 1923.
- 26 Lewis: Cabot's Urology.
- 27 Chute: Boston Med. and Surg. Jour., May 3, 1923.
- 28 Caulk: Jour. of Urology, Mar., 1925.

PREVENTIVE MEDICINE AND THE GENERAL PRACTITIONER

BY CHARLES F. WILINSKY, M.D.

Deputy Health Commissioner, Division of Child Hygiene, and Health Units, Health Department, Boston

DISCOVERIES made in the past twenty-five years regarding the causative factors of many diseases furnish a sound background for theories and practices governing the field of preventive medicine. While most of this work is being done by organized groups which function

as private or public health agencies, a great deal has been said and much has been written about the general practitioner's being an important and necessary factor in the development of this work. Nothing consequentially concerted has really been done to thoroughly interest and arouse a strong desire in him to participate in the preventive program.

WHAT IS PUBLIC HEALTH AND PREVENTIVE MEDICINE?

In endeavoring to define public health and preventive medicine, Professor C. E. A. Winslow has frequently been quoted. His concept may be briefly summarized by saying that public health and preventive medicine is the science and art of preventing disease in individuals and organized groups. Its objective is obtained by education which emphasizes individual and community hygiene, sanitation, housing, control of disease, etc. The development of the above program is expected to result in people living not only longer, but happier lives under pleasanter environments and conditions, with the individual himself contributing to the development of a higher standard of community health.

It is becoming more evident that preventive medicine is not a mythical, ambiguous, indefinite, Utopian theory, apparently impossible to contemplate as a sound practice, but is rather a feasible plan, already a justifiable cause for the diminution of many conditions and diseases, proof of which is being assembled.

THE PREVENTIVE MEDICINE PROGRAM OF THE GENERAL PRACTITIONER

There is nothing so important as good health which may only be maintained by the prevention of disease, and it is the specific function of the physician to endeavor to maintain a certain control over the latter, so far as it is humanly possible.

In addition to a community interest in the important and broad question of general hygiene, housing and sanitation, there are certain distinct, specific services which exert a fixed influence upon the control of diseases and which very properly may be carried on by the general practitioner.

PRE-NATAL INSTRUCTION

In a review of the cycle of life we may properly begin by speaking of pre-natal service which points out the hygiene of pregnancy, teaching the expectant mother how she may conduct herself, what she may or may not do, what she may or may not eat, how much or how little she may exercise and what she may or may not wear. We do know that if she is governed by this advice, her carrying period will be pleasanter and her lying-in period expectantly safer and conducive of better results

than may be expected if no pre-natal advice is given and no recommendations carried out. We have been taught that this has an important relationship to the future offspring and has played a material part in the reduction of infant and maternal morbidity and mortality. Is not this preventive medicine, and has not that been taught to the medical student, and is he not expected to use this in his practice?

PREVENTIVE MEDICINE AND THE BABY

When the baby is born, it is preventive medicine to impress the mother with the value of breast feeding and to see that it is carried out in every possible instance, pointing out to the mother not only the advantages of the same, but the things which may be of influence on and benefit to lactation. If the baby is to be wholly or partially bottle-fed what more presentable opportunity for preventive work is there than carefully supervising that very trying period of infant life, emphasizing the relative value of milk modification, cleanliness, sterilization, etc., avoiding thereby gastric disturbances with its chain of constipation, diarrhea, vomiting, acid stools, etc?

Every physician is not expected to be a skilled pediatrician, but he ought to be appreciative of fundamental principles which influence and govern child health.

PRE-SCHOOL PERIOD

When a child reaches the age of two, and until it is five years of age, it is classified as a pre-school age child, and this period from the viewpoint of the moulding of the mental and physical structure of the youngster is regarded as the most important in the life of the individual. Here there is offered a splendid opportunity for the absorption of the correct principles of mental hygiene, under which come correction of faulty habits. While the general practitioner is not expected to be a psychologist, he can acquaint himself readily with the outstanding principles which are regarded as abnormal in the youngster, and which ought to be eradicated before these abnormalities develop into increased morbid reactions.

Here an opportunity presents itself to point out postural defects, and while again, the general practitioner is not expected to be an orthopedist, he ought to be able to recognize these defects and to be able to impress the parents of the child with the value of the correction of the same. There is a splendid field of opportunity for prophylaxis, in the correction of faulty nutrition and by impressing the mother with the relative value of proper diet and its relationship to malnourishment and overweight.

Dental prophylaxis offers an opportunity for training the youngster to have a proper appreciation of the care of the teeth as well as impressing the parents with the need and value

of the care of the primary teeth and their relationship to the permanent ones soon to follow. One does not need to be a dentist to recognize whether that care has been given and the doctor is thoroughly qualified to appreciate the importance of this care.

THE SCHOOL CHILD

A great deal may be done for the school child by the family physician in the way of coöperation with the school physician and school nurses, in pointing out the value of speedily eliminating remediable defects, in that way improving health and doing away with mental retardation.

Cannot the remedy of primary defect and thereby avoiding a more serious secondary condition, be construed in a measure as preventive medicine, which the general practitioner, by his coöperation, is assisting in practicing?

The general practitioner should point out the value of control of communicable diseases by emphasizing the importance of isolation, the postponement, if possible, for later in the life of the child of contraction of communicable diseases, when the youngster may be older and more able to resist the complications which frequently accompany these conditions; the value of vaccine therapy which may be best exemplified by the control of smallpox with vaccinations, diphtheria with toxin anti-toxin administration, typhoid with anti-typhoid vaccine, and other controls that we hope will follow.

PREVENTIVE MEDICINE FOR THE ADULT

Disseminating general health education for the adult with emphasis on fresh air, sunlight, regular habits, moderate exercises, sufficient sleep, proper diet, and the value of periodic health examinations, the so-called physical stock-taking which no individual can afford to ignore, can surely be construed as thoroughly practicing preventive medicine. Cannot the physician point out to his adult patients the accepted knowledge of the association of overweight with kidney diseases, diabetes, high blood pressure, flat feet, etc.? By doing this does he not both practice and preach preventive medicine and become a most powerful ally to the public health officer, and in that way is he not of tremendous community aid?

EXISTING CONDITIONS AT PRESENT

Allusion has already been made to the fact that a program of preventive medicine is now carried on by agencies in which are included health centers, baby hygiene stations, periodic health examination clinics, anti-tuberculosis associations, settlement houses, etc., who are vitally interested in community health and who have organized themselves to carry on this most efficient work. It has been pointed out that one-eighth of our total population avail them-

selves of the facilities of dispensaries, health centers, etc., yearly, making a tremendous total of over thirty million visits. A great deal of this work comes under the heading of prophylaxis. It is impossible to tell how many of these are actually being sent away from the door of the general practitioner by the doctor himself, because of the fact that he has done so little to justify the belief that he is aware of the virtue of preventive work and that he is able to give to the people the very service that they go to the health center to obtain.

Many people go to the health center and other similar agencies for pre-natal service, infant and child hygiene conference, posture clinics, nutritional classes, mental hygiene clinics, periodic health examination clinics, etc., and yet these very same people immediately call on their family physician for curative medical assistance and care when someone in the family is ill, and immediately vest him with an assured confidence in their belief in his ability to get that patent well. Is it not evident that it is because the same family physician has manifested no apparent interest in preventive medicine and has in no manner indicated his ability or willingness to give his clientele the services they wish. An interesting situation is the fact that general practitioners are frequently functioning on the staffs of dispensaries, health centers, baby conference stations, etc., and yet they have done nothing to develop these same services in their own offices for their own patients.

DEMANDS OF THE LAITY

The laity is now demanding of the medical profession, everything which is worth while in the field of public health and which will conserve energy and add years to the span of life. Women have emphasized their interest, and through the medium of mothers' clubs, women's leagues and other organizations, have displayed an interest in the advancement in medicine and have quickly seen the possibilities of prevention of disease and are demanding of the physician at least an equal interest in furthering life. It is unfortunate that this demand is satisfied in most instances by institutions and other organized groups rather than by the family physician. There are isolated examples of the general practitioner, alive to the possibilities as well as advantages of this fertile field in medicine, accommodating himself speedily to this splendid work. The fault lies in the fact that so few are participating in this type of practice.

We hear of state medicine and its dangers. State medicine can only come because of the demands of the people for the things which are recognized as essential and worth while, in order that they may be kept well but which the every-day general practitioner does not seem

willing or desirous of equipping himself to give them.

HOPES OF THE FUTURE

Preventive medicine offers much attraction to the layman. Everyone wishes to live as long as he can and under happy conditions. The things that the health center and allied institutions promise seem very attractive to men, women and children, and the treatment seems most simple.

The general practitioner is the most important cog in the public health machinery and has by no means lost the confidence of his patients. Getting him really interested and participating, not only would furnish tremendous impetus to the development of public health, but would instill a new confidence among the laity in the value of the things that preventive medicine promises and offers.

Why should not the general practitioner practice preventive medicine in his office? What have we a right to expect of the physician of today relative to his ability to carry on this work based upon his training? What has the layman a right to expect of his physician? How well is he equipped to carry on this work?

Let us reasonably presume that in his medical training he has been taught the principles of physiology and anatomy, thus giving him a correct perspective of the normal human. He has also been taught the symptomatology of the diseases to which man is heir. He therefore is expected to have a knowledge of the two viewpoints, the well and the sick. We will presume that when an individual presents himself at the doctor's office, the latter ought to be reasonably expected to make a diagnosis of whether the person is well or ill. He is expected, in view of the modern progress, to add to his knowledge the up-to-the-minute principles of preventive medicine. Is it too much to expect of the physician of today to apply himself as thoroughly and diligently to an absorption of the principles of this field of medicine as he does to the new curative aspects that present themselves from time to time? Cannot the general practitioner with an application of the same thoroughness which prompts him to practice curative medicine, disseminate, when necessary, pre-natal advice? Does it seem impossible for him to weigh and examine the babies of the families whom he lists as his patients? Can he not adapt himself to a scale of heights and weights and perfect himself in other little details so that he may be able to diagnose the malnourished child, and upon making that diagnosis, can he not prescribe the diet, exercise, mode of living and other things which will convert that youngster from a malnourished individual into a healthy one?

Cannot the physician back up the opinion of the school physician and quickly point out to

the mother the necessity of correcting physical defects? The physician can conduct a periodic health examination in his office and quickly ascertain by a study of the hygiene sheet, which the patient will submit to him, whether his patient is living the right kind of a life, eating the right kind and enough or too much of certain foods, whether he is exercising enough or too much.

We are familiar with the fact that in the ordinary routine practice of medicine there are periods when the physician is busier than at other times because of the influence of climatic conditions upon the increased prevalence of disease. This brings out the fact that there are times when the physician may have less to do and finds time idling upon his hands which might be called wasted and which could very well be occupied with the practice of routine preventive medicine, uninfluenced by seasons.

To those physicians who may see in this development a diminution of practice, may be pointed out the endless possibilities of inculcating the principles of preventive medicine in the minds of each and every member of his families, and once these principles are disseminated, it is reasonable to believe that every one desirous of living well and longer, can only realize his objective by frequent consultation with the family physician, who will teach him how to carry out that program, and for this the doctor has every reasonable right to be compensated.

One may safely offer this type of practice, at least as a sound supplement to the frequently unsatisfactory bedside work with its chain of disappointments and unfavorable prognosis.

When one realizes that he will find along the entire path of human life, a field of activity for practicing preventive medicine, one need not worry about its possibilities and should have very little hesitancy in adding to the field of curative medicine the more satisfactory one—prevention of disease. The field is large, the work just as definite, and even at the expense of being called commercial, the compensation just as great.

CONCLUSION

The general practitioner, if he cares to apply himself, is able to do this work, and he has only impeded its progress as well as held himself back by a lack of appreciation of his most important place in this program. He is urgently needed and should have the assured confidence and backing of those who understand this work and wish to see it progress. He has readily been able to accommodate himself to the more difficult curative aspects of medicine, and his ability to do this work well can be measured by his relative standing and conscientious application to the principles of curative medicine.

The physician will frequently be obliged to

refer his patient to the trained specialist for advice, but is he doing that in the curative field of medicine? Why should there be any more hesitancy in referring a patient for advice relative to posture, mentality, nutrition, etc., when a problem arises?

When the rank and file of general practitioners manifest a sound interest in this important field of medicine, and only when they do, will this work make the progress that the leaders of the medical profession wish to see it make, and it behooves the outstanding figures of the American medical world to preach this

gospel through the medium of national, state, county and local medical societies.

The principles of preventive medicine are sound and the visualized result is the development of sounder physical and mental manhood and womanhood. Upon this depends our very national existence, and one may honestly appeal to the patriotism as well as to the common sense of the American medical profession, to rush forward this very necessary piece of work, with resulting benefit to their country and to themselves.

NEW ENGLAND BRANCH OF THE AMERICAN UROLOGICAL ASSOCIATION

THE forty-fifth meeting of the New England Branch of the American Urological Association was held at the Harvard Club, Boston, on February 3, 1925.

The minutes of the last meeting were read and approved.

Doctors Hepburn and Spillane of Hartford, Conn., were elected to membership. It was moved, seconded and voted that the Secretary cast one ballot for the election of Doctors Hepburn and Spillane. This was done.

Dr. Chute read the report of the committee on resolutions on the death of Dr. Halpin of Lowell. A copy of these resolutions is attached to these minutes. It was moved, seconded and voted that this report of the committee be accepted.

Doctors Chute, O'Neil, Bieberbach, Riley, Hunt, and Crabtree reported cases.

Dr. Ira N. Kilburn of Springfield then read a paper on "Deep X-ray Therapy in the Treatment of Malignant Tumors of the Bladder."

Doctors G. G. Smith, R. C. Graves, A. H. Chute, J. W. Keefe, and W. W. Townsend discussed this paper, and Dr. Kilburn in closing. Meeting adjourned.

AUGUSTUS RILEY

Case of Profuse Haematuria. Pyelogram and Specimen. Man, chauffeur, 23 years old, admitted to the wards of the Boston City Hospital, January 13, 1925. His chief complaints were "dull ache in his right side in region of right kidney and passing blood in his urine." Patient states that since 1918 when he had an attack of influenza he has had severe pain in region of right kidney, these attacks coming about an average of four attacks a year, each attack lasting three to four days. Last attack of pain about three weeks ago, since then he has been passing bloody urine. No urinary symptoms previously. No history of trauma.

General physical examination negative ex-

cept for slight tenderness over region of right kidney. Wassermann reaction positive.

Cystoscopic Examination: Instrument passed with ease. Bladder full of blood-clot, so much blood-clot that it had to be evacuated with suction force. Profuse bleeding from right ureter; both ureters catheterized. Function Test gave a color reaction in five minutes from the left kidney; unable to determine any function of right kidney because of profuse bleeding.

Pyelogram: 80 c.c. sodium iodide 12% injected into right ureter with very little distress in region of right kidney. Left kidney pelvis took 12 c.c. X-Ray films, as you see, shows a somewhat dilated kidney pelvis of the left kidney. On the right side is a very large irregular shadow, both of pelvis of kidney and kidney outline.

X-Ray Diagnosis: Large polycystic right kidney with dilated pelvis.

Operation: Nephrectomy, before the clinic. Exposing the kidney, large perirenal blood-clot found outside of the true kidney capsule, kidney cortex ruptured near its lower pole. Kidney pelvis large and filled with blood-clot. No calculi.

Pathological Report: Kidney destroyed, shows evidence of chronic glomerular nephritis with focal and sub-capsular hemorrhage.

Some of the striking features of this case are: Profuse haematuria for past three weeks, the pyelogram as you see it here, showing that some of the sodium iodide has probably passed out through the ruptured cortex found at the time of operation, and the story of some general infection some six years ago followed by attacks of severe pain in right kidney region each year, last attack three months ago, when his haematuria began, and the pathological report.

I have the specimen here, and will pass it around, that you may see the patches of haemorrhagic areas throughout the incised cortex, and the destroyed portion where the rupture occurred.

DEEP ROENTGEN THERAPY IN MALIGNANT TUMORS OF THE BLADDER*

BY IRA N. KILBURN, M.D., SPRINGFIELD, MASS.

The cancer problem to the Urologist has been as much a problem, as it has to the general surgeon, especially when the prostate or bladder was concerned. There have been times when a good many of us had the feeling that our hands were tied, and that it was impossible for us to do anything of benefit for the unfortunate cancer patient, except to make him or her as comfortable as possible. I feel safe in making the statement, that we are often-times placed at a great disadvantage, in that we are not able to do more for these cases, for the very reason, that in the majority of instances, we do not see the patient until the malignancy has progressed to such an extent that the general condition of the patient is severely menaced.

It is not the purpose of the writer in this paper to discuss the different methods that have been in use, in combatting cancer. Surgery, it is known, has always been the chief method of attack, but it was surprising in reviewing the literature, especially as to the non-operable methods of treatment that were collected by Beek¹ since 1895, to see how many different methods that have been tried during the past 30 years. I will quote them as follows:

1. Bacteriotherapy.
 - a. bacterial products.
 - b. immunizing process.
2. Chemotherapy.
 - a. arsenic atoxyl, salvarsan, arsantin.
 - b. kankroin.
 - c. antituman.
 - d. quinine, formalin, resorein, kolargol.
 - e. metals.
 - f. cholin.
3. Physical Means.
 - a. X-Rays.
 - b. radiative substances as radium, mesothorium and thorium X.
 - c. fulguration.
 - d. diathermia or dessication.
 - e. electrolysis, Finsen light, heliotherapy and carbon dioxide snow.
4. Miscellaneous Agents.
 - a. pharmacological substances.
 - b. organotherapy.
 - c. ferments and antiferments.
 - d. circulatory destruction.

Of these many methods, those that are in use today are X-Ray, radium, diathermia and surgery, because they have given the best results so far.

The treatment of superficial growths by X-Ray, as we all know, has been the practice for a long time, but with the poor results, that were obtained and, with the desire to try and reach

the deeper structures, and to make such treatment more effective, the experimental work was started by using machines of a higher voltage, so that the rays would be able to penetrate the superficial tissues, and reach structures within the body.

As to the action of the ray on the growth or tumor, there have been many theories advanced, none of which can be accepted as fact. Bachem² mentions the fact that, the action of the ray will cause dissociation of the atoms, thereby changing the structure of the atom and molecule, whereby diathermia will only cause the dissociation of the molecule. Warthin and Case³ speak of the phagocytosis of Nuclear material after Irradiation; the breaking down of the cells and the carrying away of the products of destruction by the blood stream. Armstrong⁴ states in an editorial in the *Surgery, Gynecology and Obstetrics*, a number of theories that have been advanced as to the action of radiation from high voltage, namely that lecithin present in the tissues is decomposed by the radiation and the products of this disintegration are responsible for the action of the disappearance of malignancy; another theory is that of specific activation of intracellular enzymes, but these theories have really never been substantiated. He further states that radiation has a local influence, often for the better, on malignant growths. But, do they prolong life? They are analgesic, and are mentally comforting. It would seem from these statements, made by all good observers, that the real action has not been found, or at least the cause for the destruction of malignant growths has not as yet been discovered.

That irradiation does influence a cancerous condition, is to be accepted as a fact, for after such treatment, symptoms do disappear; at least in some cases, and patients are better. We do know this, that the more highly specialized tissue will not be influenced by the proper use of the ray, and that embryonic tissue will be influenced by such, but does this influence really cure malignancy? Will it really prolong the life of the afflicted individual? True it is, that patients will gain in weight and strength, and appear markedly improved after such a treatment.

The answer to this question is, that if such treatment is instituted and carried out judiciously, and intelligently, and there is a close coöperation of all concerned, there will be some benefit derived from such treatment. Ullman⁵ advances the following hypotheses:

1. That tumor cells are not killed in the ordinary sense by radiation.
2. That to obtain a cure, we must give not only a quantity and quality of radiation that will be detrimental to the tumor, but also one that will not break down the bodily defenses:

*Read before the New England Branch of the American Urological Association at the Harvard Club, Boston, Mass., February 5, 1925.

3. That the proper dosage should stimulate bodily resistance or reaction in addition to injuring the tumor cells.
4. That heavy radiation renders the body as a whole more susceptible to tumor growth, while light radiation makes it more resistant.
5. That the proper or optimum radiation in any given instance depends, not only on the type of tumor cell, but on all the factors which involve the physical condition of the host, i. e., his ability to react in the proper manner.

It would seem then, that, except in the hands of one experienced in roentgenology, that harm might and would come from such treatment. Clark⁶ makes mention of the fact that, the well known treatment of tumors by roentgen rays, of course depends upon the preferential destructive action of the radiation upon cells with abnormal growth function. Here is a pertinent example of the age old truth, that any good thing may be very harmful if ignorantly used. The newer results in the actual curing of cancerous conditions when not hopelessly acute, and even in the temporary relieving of suffering in far progressed cases, stamp these rays if intelligently used, as literally a great beam of light searching the dark places in medical science.

Not being a roentgenologist, it is impossible for me to explain the physics of the high voltage machine. It is necessary though to have a machine which has a voltage of 300,000 volts. On some of my cases, which were treated by Dr. Harvey Van Allen, Roentgenologist at the Springfield Hospital, he gave the full load of 300,000 volts. The patient was placed in a recumbent position in a heavily lead-lined room. The patient was covered entirely by heavy leaded rubber sheeting, the only portion of the body being exposed, being the suprapubic region. With everyone except the one being treated, out of the room, and with the patient in constant view during the whole treatment, the current of 300,000 was turned on, the time of exposure being fifteen minutes. A rest of five minutes was then given the patient, and then another like exposure given with the rays entering the bladder at a different angle; two more like exposures were given at this same sitting, the only difference being a different angle at which the rays were shot into the bladder, in other words the growth was cross-fired. Of late, instead of using such a high voltage and for possibly such a long period, a dose of 200,000 is used with the recommendation that the time be cut down by one-half, and such treatment be repeated in one or two days, this constituting a course. Opitz⁷ believes that small doses have a stimulating effect on cancer cells, and that large doses will kill the same, but also will affect the surrounding tissues. He

has seen cases cured by small doses and recurrences by maximum ones. The action, he believes, does not consist in a direct destruction of cancer cells, rather it causes formation of chemical substances, which may influence the cancer even if the rays are not applied directly to it. As to the number of courses, that depends entirely upon the individual case. There have been arguments used against the use of deep roentgen therapy in bladder tumors, in that metastases are formed either in the osseous system or lung tissue. Moore⁸ denies this as he has made careful roentgenographic studies of these cases during their treatment and for a period of two years after, and he has failed to see such occur.

As to the benefits that come from such treatment, on reviewing the literature, the author finds a divergence of opinion in regard to such. There are those who condemn it, others who are luke-warm and still others who favor such treatment. Thomas⁹ feels that little needs to be expected and that little will be realized in advanced, inoperable cases. Squier¹⁰ feels that this form of procedure is very much in the experimental stage as is radium, and that we must not expect too much from such. Geraghty¹¹ feels that where a tumor has been too extensive for the employment of radium or surgery, or a combination of radium and surgery, that radiation from a high voltage, roentgen-ray machine when used gave most encouraging results, and were of such a nature to suggest that with the development of a more perfect technic, would prove a potent factor in the therapy of bladder tumors. Hernandez e Ibanez¹² considers deep roentgenray therapy and also radium in addition to fulguration for cancer of bladder, as being of extreme benefit. He cites eleven cases with no recurrences since 1921. Waters¹³ also believes that where surgery would be too extensive, and that where the growth would be inaccessible in the bladder, that radium or high voltage treatment gave the best results. Heuser¹⁴ cites six cases treated with five living and one dead, one year from treatment. In four cases the growth was such that surgery could not be employed, while in the fifth the nature of the operation was not revealed. Following deep roentgen treatment all symptoms had disappeared and the growths were disappearing.

Since April, 1922, there have been eleven cases of malignant tumors of the bladder, that the author has had charge of, or else directly associated with, where the deep Roentgen-Ray therapy has been used. The abbreviated case histories are as follows:—

CASE 1. Male, Swedish, age 60, married, machinist.

Four years previous both testicles became swollen, one was removed, he refusing to have other removed. Not known what the pathol-

ogy of the removed testicle was. Last 7 months has been suffering from frequency and pain on urination, and at times of passing blood in the urine, also said that large clots and casts would come away, which caused much pain and increased amounts of blood in the urine. Has lost 25 lbs. in weight during last year. By rectal examination, the prostate feels hard and nodular and resembles that of malignancy.

April 12, 1922:—Cystoscopic examination shows no obstruction at bladder neck or any intra-urethral enlargement of prostate. Superior and left lateral walls of bladder free from any growth, but on right lateral wall, from base of trigone forward to vesical orifice is a fungating mass, the size of a twenty-five cent piece. Any operative procedure was refused and patient went to Philadelphia to his daughter's where he had, so he says, 4 exposures to deep X-Ray. He returned home in August, 1922, and was so much in pain, that after cystoscopy revealed the progression of this mass to whole of right wall of bladder and of vesical neck, a suprapubic cystotomy was done for the relief of his dysuria, and a portion of tissue removed proved the growth to be a malignant papilloma. Patient died Oct. 2, 1922, the malignancy extending upwards into suprapubic wound.

CASE 2. Male, Lithuanian, age 44, married, machinist.

Eighteen months ago blood was noticed in the urine for 2 weeks, with pain and burning on urination. Since that time has only slight burning and urinates only small quantity and frequently. Has lost 15 lbs. in one year and feels himself getting weaker. Three days ago started bleeding again and passing clots in the urine.

Oct. 23, 1922:—Cystoscopy revealed a large pedunculated papilloma at left edge of trigone near the bladder neck.

Nov. 1, 1922:—Suprapubic opening made into bladder, mass including the base of pedicle exercised by cautery. Pathological report of mass removed showed same to be a malignant papilloma. After wound had healed he had 3 courses of deep X-Ray treatment during the next 6 months.

On May 15, and Aug. 1, 1923, and Jan. 2, 1924, cystoscopy reveals no tumor mass in bladder. Patient is weighing his old weight and feels as strong as ever.

CASE 3. Male, American, age 39, married, hatter by trade.

For 2-3 months has been troubled with frequency and pain on urination, which has been increasing of late, and for last 2 weeks has noticed terminal hematuria and nocturia, 2-4 times a night. Has lost 14 lbs. in last 4 months. Oct. 25, 1922, cystoscopy was unsuccessful on

account of bleeding caused by examination and severe cystitis that was present.

Oct. 29, 1922:—Following boric acid irrigations the 2nd cystoscopy revealed a severe cystitis with much pus and flakes floating in bladder fluid. Numerous small papillomata were found attached to bladder neck and one larger papilloma, about the size of the little finger nail, was seen on right wall of bladder adjacent to trigone. Patient returned home and reported back for operation Nov. 19, 1922, when, through suprapubic incision the large sized papilloma was excised at base of pedicle by cautery and small papillomata at bladder neck were cauterized by hot iron. Pathological report of specimen removed was that of malignant papilloma. Suprapubic wound was very slow in healing, patient being discharged from hospital March 4, 1923. Since that time has had Deep Roentgen treatments every 3 months until Aug., 1924.

Sept. 15, 1924:—Cystoscopy shows no evidence of any tumor mass, but the cystitis is still present.

CASE 4. Male, German, age 59, single, baggage-master.

Has had frequency of urination for last 2 years, and for last 2 months twice a night, also difficulty in emptying bladder during this time, and at present has to be catheterized. Has noticed blood in the urine for the last 3 months, for 1 or 2 days a week. In addition to this urinary disturbance, patient has a large mass in lower left quadrant of belly, and glands in left groin are markedly enlarged. Prostate by rectal examination is enlarged and nodular. Dec. 14, 1922, Cystoscopy shows a mass extending from left side of trigone over lateral wall of bladder the size of a twenty-five cent piece, such is cracked and fissured in appearance. A diagnosis was made by consultants, after cystoscopy of malignancy of bladder, prostate and sigmoid, and it was deemed inadvisable to operate. He was given one course of Deep X-Ray, but reacted very poorly to it, being very nauseated, he refusing to have any more treatments. He was cystoscoped again on Dec. 29, 1922, no change was noticed from the first examination, except there was no bleeding. Patient died Jan. 8, 1923, of general carcinoma.

CASE 5. Male, American, age 66, married, postmaster.

For last 2-3 years has noticed increased frequency of urination at different spells, lasting for 2-3 weeks at a time. For 3 months now has noticed blood in the urine, which would clear up after taking urotropin for a day or so. Has had five such spells of bleeding. For last 4 days has had blood and clots in urine constantly and has passed clear blood also. Has lost 10 lbs. in 3 years. Jan. 2, 1923, Cystoscopic examination:—Bladder only holds 120 c.c. of

fluid. Three small papillomata are seen on roof and lateral wall of bladder, a piece of one tumor was obtained and examination made by the pathologist showed the growth to be a malignant papilloma. Believing that he had a bad heart, he refused any surgical procedure. Deep X-Ray therapy was recommended, and two courses were administered. Cystoscopy on June 28, 1923, showed that previous papillomata had disappeared, but on opposite side at junction with roof was another papilloma. Had 2 more courses, and on Sept. 6, 1923, was cystoscoped again, and was unable at that time to find any evidence of papilloma. Jan. 10, 1924, Cystoscopy shows at site of last tumor, a much larger mass than before. Has had two spells of hematuria since last examination. June 27, 1924, has had 2 more courses in the interval and examination shows that growth has diminished in size. Sept. 4, 1924, since last examination 2 more courses were given. Has seen blood in the urine at intervals. Cystoscopy shows the growth to be larger than before, but not the same in character and appearance, is much smoother than before. There is no evidence of any other growth in the bladder. Patient has gained 27 lbs. since he first started with treatments and is feeling as strong as ever, but is very nervous as to his condition. Surgical intervention is now advised in this case.

CASE 6. Female, American, age 65, widow, at home.

For 10 years has had frequency and burning on urination; 3-4 times during that period had passed small quantities of blood. Seven months ago had a cystoscopy done in Portland, Me., and tumor mass was found, which was fulgurated 3 times. She became worse and was told that fulguration was doing her no good. She came to Springfield to her son's, and was admitted to the Springfield Hospital. Cystoscopy on Feb. 19, 1923, showed a large sloughing mass covering the whole of left side of bladder, with an attendant severe cystitis. The diagnosis was made of multiple malignant papillomata, from specimen obtained through cystoscope. She being extremely weak, it was considered unwise to resort to any surgical procedure, but she did receive one course of Deep X-Ray therapy. She reacted very poorly to this, being very nauseated and although she had been constipated before, her bowels were very loose for the next 5 days. She died June 5, 1923.

CASE 7. Male, American, age 47, married, superintendent of bakery.

Has had pain and difficulty for last 12 months in passing his urine, at times passing blood clots, after which he would feel better. Two days ago developed partial retention of urine, for which his physician catheterized him. For last 24 hours had complete retention, and was catheterized twice. March 9, 1923, attempt-

ed cystoscopy unsuccessful both by Dr. Henry Bugbee and myself, due to excessive blood and blood clots in the bladder. Dr. Bugbee decided to do an immediate suprapubic cystostomy and after a large amount of urine and blood clots were evacuated, a soft friable mass was found covering base of bladder. Following recovery from this operation patient went to New York twice, where Dr. Bugbee administered radium. On his return home he was given 2 courses of deep X-Ray therapy, at both of which he reacted badly, becoming very nauseated and toxic. In October he returned to Dr. Bugbee for further radium treatment. Patient continued to grow weaker and finally died Feb. 2, 1924.

CASE 8. Male, American, age 58, single, foreman box factory.

Had always been well up to 5 years ago, when he noticed blood in his urine; there were many blood clots which caused him some pain and difficulty in emptying his bladder. Up to 5 days ago had no recurrences except slight burning, when he started bleeding again, this lasting for 2 days and then stopped. There has been no loss in weight or strength. June 12, 1923, Cystoscopy showed a small, punched out ulceration, irregular in outline, about the size of little finger nail, on roof of bladder, which would bleed easily when touched. Advised operation for excision of this area, but he refused and consequently had 2 courses of deep X-Ray therapy at 5 months intervals.

Jan. 5, 1924, Cystoscopy reveals this area healed but the blood vessels around the edges of old ulceration are much injected. June 5, 1924, examination by cystoscopy shows the same condition as Jan. 5th. The diagnosis was made of carcinoma of bladder.

CASE 9.—Female, American, age 50, married, at home.

Always well until 3 years ago when blood appeared in the urine for 4 days, disappearing to recur at odd intervals. Had slight pain and discomfort on urination. Three months ago was cystoscoped by competent cystoscopist and was told that she had a growth in bladder which needed operation for its removal. Has bled frequently since, once or twice a week. Has lost in weight and feels weaker. Oct. 8, 1923, cystoscopy reveals a papillomatous mass, resembling a non-malignant papilloma on right side of bladder wall, extending down to bladder neck. Oct. 9, 1923, operation by Dr. F. B. Sweet, when through a suprapubic opening a mass was found, having a broad pedicle and being very firmly fixed to bladder wall. Specimen from mass examined by pathologist proved such to be a malignant papilloma. The whole mass was cauterized down to its base. Patient made uneventful recovery, and since operation has had 3 courses of deep X-Ray

therapy. She feels very nauseated after each treatment. At last cystoscopy on Dec. 3, 1924, there was no evidence of growth but at site of old papilloma the color of bladder membrane was a deep raspberry red, very smooth and shiny in appearance. At the present time, the general condition of the patient is good, weighs the most she ever has and has regained her strength.

CASE 10. Male, American, age 32, widower, retired.

Three years ago noticed blood clots in the urine, since which time has had spells of burning on urination, also frequency. Has lost about 20 lbs. in weight. For last two weeks has been bleeding some every day, but would not consult a physician. Feb. 27, 1924, cystoscopy shows multiple papillomata around bladder neck and a large ulceration to the right side of trigone, the edges of which bleed easily. Diagnosis of carcinoma and papilloma

following operation, but was discharged from hospital 22 days after operation with wound completely healed. Aug. 12, 1924, had one course of deep Roentgen therapy. One week later she went to Akron, Ohio. In letter of recent date, patient says she has noticed no more bleeding, has not lost any more in weight and feels strong but still has some burning on urination.

In this series of eleven cases of which eight were males and three females, the age of the youngest was 39 years and the oldest 72 years. There were nine who had papillomata and two who had infiltrating carcinomata. An interesting feature of this instance is that the latter (Cases 8 and 9) are both still alive and apparently well at the present time, while the five that are dead were all papillomatous, their ages at death being:

Case 1 _____ 60 yrs. Case 6 _____ 65 yrs.
Case 4 _____ 59 yrs. Case 7 _____ 47 yrs.
Case 10 _____ 72 yrs.

	Time of symptoms	Outcome	Time from examination	Procedure
Case 1	7 mos.	dead	7 mos.	Suprapubic and deep therapy.
Case 2	18 mos.	alive	2 yrs., 3 mos.	Suprapubic, excision of tumor and deep therapy.
Case 3	3 mos.	alive	2 yrs., 2 mos.	Suprapubic, excision of tumor, cautery, and deep [therapy.
Case 4	2 yrs.	dead	25 days	No surgery, deep therapy.
Case 5	2-3 yrs.	alive	2 yrs.	No surgery, deep therapy.
Case 6	10 yrs.	dead	4 mos.	No surgery, deep therapy.
Case 7	12 mos.	dead	11 mos.	Suprapubic, radium and deep therapy.
Case 8	5 yrs.	alive	19 mos.	No surgery, deep therapy.
Case 9	3 yrs.	alive	15 mos.	Suprapubic, cautery and deep therapy.
Case 10	3 yrs.	dead	8 mos.	No surgery, deep therapy.
Case 11	6 mos.	alive	7 mos.	Suprapubic, excision of tumor, cautery, and deep therapy.

of bladder made and condition explained to patient. He refused any operative procedure and went to Chicago to live with relatives. He had one course of deep X-Ray therapy, but it was reported that he refused further treatments, on account of extreme nausea caused by the treatment. Patient died Oct. 10, 1924.

CASE 11. Female, age 66, American, widow, housekeeper.

Past history negative. For last 5-6 months has noticed blood and blood clots in the urine but has had no pain or discomfort except 3 weeks ago when she had very severe pain in bladder region lasting for 2 hours; she was given morphia by her physician for relief of pain. Has been passing blood since. She feels weak and knows that she has lost in weight, but does not know how much. Cystoscopy June 12, 1924, shows a papilloma, evidently malignant, on left lateral wall of bladder about the size of a small English walnut, and 2 small papillomata at vesical neck. Operation June 21, 1924, Suprapubic Cystotomy: Large papilloma and pedicle excised by cautery and cautery iron applied to small papillomata. Patient had a stormy 3 days

All cases presented symptoms of hematuria, frequency on urination, loss of weight and strength. The length of time of symptoms, or age of patient did not influence the outcome in any degree. Treatment caused bleeding to cease in all of the cases, except when it recurred in Cases 5 and 9, to disappear again after further treatments. The previous endo-vesical fulguration in Case 6 aggravated the malignancy. The three cases where the papillomata were excised are all living, the one case where radium was used is dead; the one case where cautery was used is alive. The two suprapubic cystotomies that were done for the relief of symptoms are dead. In the case⁸, where no operation was done, there is still present, at end of one year, a growth though not resembling a malignant papilloma.

In considering the malignant problem of the bladder, as of malignancies elsewhere in the body, it would be wise to stop and consider just what good, and what benefits, are to be derived from whatever means of intervention are employed. The most important factor is that of the condition of the patient, namely, his resistance. Shall we, by the employment of sur-

gery or any of the other methods mentioned, lessen the patient's general resistance (which is undoubtedly low) and thus, in the removal of the malignancy or the retardation of it, hasten his death? Perhaps, at times we are overzealous in our desire to cure, and good judgment gives way to our zeal. Of the methods now known and practised in combatting bladder malignancy, it would seem that Deep Roentgen therapy would be the best means of improving the conditions. Here, too, caution must be used in such employment, for in cachectic patients and in anemics, caused by the malignancy, much harm will come if the deep rays are used.

From the limited number of cases presented herewith, and realizing the short period of time that has elapsed for the observance of the ultimate results on the six cases that are alive today, the writer feels that we have not a method of attack, par excellence in Deep Roentgen therapy for malignant tumors of the bladder. Where there is not a universal acceptance of a method of treatment, and where there is such a divergence of opinion as to the efficacy of any method, we must adopt such a method of attack with an open mind and be ready to accept honest criticism, in the hope that at some not distant time, we will have a means by which we can successfully combat a malignancy of the bladder.

It has not been the purpose of this paper to compare the different methods known today of treating bladder malignancy, but if such cannot be attacked surgically and removed, either by reason of its extent, inaccessibility, or the extreme condition of the patient, then we have in Deep Roentgen therapy, an adjuvant along with radium and diathermy, in combatting this dread condition, although it may do nothing more than prolong the life of the individual, or ameliorate his sufferings.

REFERENCES

- 1 Beck, Joseph C.: Index of Oto-Laryngology, Dec., 1912.
- 2 Bachem, Albert: Radium and Roentgen Rays as Different Agents in Superficial and Deep Therapy. *Am. Jour. Roentgenology and Radium Therapy*, N. Y., Vol. XI, No. 1, Jan., 1924, p. 12.
- 3 Warthin, Alfred Scott, and Case, James T.: Phagocytosis of Nuclear Material (etc.). *Am. Jour. Roentgenology and Radium Therapy*, Vol. XII, No. 2, Aug., 1924, pp. 102-110.
- 4 Armstrong, George B.: Are Radiations Proven to Be of Value to the Patient Suffering from Malignant Diseases? *Surg., Gyn. and Obst.*, Vol. XI, No. 1, Jan., 1925, p. 134.
- 5 Ullman, H. J.: The Treatment of Cancer. *Am. Jour. Roentgenology and Radium Therapy*, Vol. XI, Mar., 1924, No. 3, p. 255.
- 6 Clark, George L.: The Versatility of Roentgen Rays. *Am. Jour. Roentgenology and Radium Therapy*, Vol. XII, No. 6, Dec., 1924, p. 567.
- 7 Opitz, E.: Irritation of Cancer. *Medizinische Klinik* (Berlin), Sept. 9, 1923, p. 1215.
- 8 Moore, Sherwood: High Voltage Roentgen Ray Therapy. *Jour. A. M. A.*, Vol. 81, No. 4, pp. 269-274.
- 9 Thomas, B. A.: The Treatment of Bladder Tumors. *Trans. of Section of Urology, A. M. A.*, 1920, p. 34.
- 10 Squier, J. Bentley: Segmental Resection of the Bladder for Neoplasms. *Surg., Gyn. and Obst.*, Vol. XXXVII, p. 179.
- 11 Geraghty, J. C.: Modern Urology (Cahot). Tumors of the Bladder. Vol. II, p. 247.
- 12 Hernandez e Ibanez, J. A.: Roentgen Ray Therapy in Cancer of Bladder. *Revista Medica Cubana*, Havana, Apr. 1924, p. 263.
- 13 Waters, Charles A.: The New Type of High Voltage Roentgen Therapy in Treatment of Carcinoma of Bladder. *Am. Jour. Roentgenology and Radium Therapy*, Vol. XI, Jan., 1924, p. 22.
- 14 Heuser, Carlos: Results Obtained After Two Years' Application of Deep Roentgen Therapy in Cases of Cancer of the Prostate and Bladder. *Am. Jour. Roentgenology and Radium Therapy*, Vol. XI, Jan., 1924, pp. 23-25.

DISCUSSION

DR. GEORGE GILBERT SMITH: I had hoped to say something on this interesting subject. Dr. Kilburn's conclusions are sound and proper, according to our present knowledge of the subject of the malignant diseases of the bladder. The modus-operandi of deep X-Ray or radium packs is uncertain. Dr. Ewing of New York believes it impossible to kill cancer in the interior of the body by radiation from outside. He believes it can be killed only by radium implanted within the growth. The effects of radiation from the outside seem microscopically to be due to the effect on the endothelial cells lining the lymphatics and blood vessels causing proliferation and blocking of these vessels and decreased nourishment of the tumor.

Another effect of deep radiation is seen in the increase of connective tissue. This proliferation of fibrous tissue surrounds the tumor cells and entangles them in a network from which they do not easily get into the lymphatics. In this connection it may be worth while to mention a case of carcinoma of the base of the bladder. In July, 1924, the patient was given 4 half erythema doses applied anteriorly and posteriorly to the pelvis. The kilo voltage was 170, filter $\frac{1}{2}$ millimeter copper, current 3 milliamperes. Each treatment aggregated 600 electrostatic unit seconds. In spite of this treatment the growth continued and, on December 4, his bladder was opened and radium implanted. A piece of tumor excised at that time showed apparently healthy, rapidly growing carcinoma.

At the Huntington Hospital a voltage of 170 kilo volts is employed instead of the 300 kilo volts reported by Dr. Kilburn. The Huntington Hospital employs a corrected reading and I doubt if the voltage reported by Dr. Kilburn actually represents the real voltage.

There is a great difference in the way in which patients react to radiation. The cases of papilloma recorded do not prove much in particular, as they often do not recur after removal even without X-Ray treatment. X-Ray is an adjunct to treatment of malignant tumors of the bladder. Surgery or implantation of radium should be employed in addition.

DR. R. C. GRAVES: I have enjoyed Dr. Kilburn's paper and Dr. Smith's very adequate discussion.

It is of the utmost importance that we record and analyze, in this way, our experiences with bladder malignancy. If we are to deal more effectively with this difficult problem, we must make full use of every contribution which throws new light on the subject.

We all agree that deep X-Ray therapy is an important adjunct to surgery in bladder can-

cer, but we still know far too little concerning its limitations and its accurate clinical use.

Dr. Kilburn is to be congratulated for his careful helpful study.

DR. A. L. CHUTE: Dr. Kilburn has given us a very pleasing and accurate discussion on this subject. Because of the great gaps in our knowledge regarding the natural history of carcinoma, it is going to be a very long time before we will be able to draw accurate conclusions as to what we may expect from different sorts of treatment. I have the feeling that the X-Ray treatment and radium should always be used in conjunction with surgery and that they probably add somewhat to the efficiency of the surgical treatment.

DR. KEEFE: I thoroughly enjoyed Dr. Kilburn's presentation of the cases and am glad of his report in detail. In the treatment of these conditions I believe it is wise to excise and cauterize when you can. Employ deep X-Ray therapy as an adjunct to this treatment. X-Ray treatment, surgery and radium treatment all give deaths. (Reported a recent case of carcinoma of the superior maxillary which occurred after removal, but which responded surprisingly well to deep X-Ray therapy in eliminating the recurrence.)

DR. TOWNSEND: I was interested in talking with an English surgeon today who had just returned from a six months' visit to the Mayo's, and during the conversation I asked him what position the Mayo Clinic was taking towards the treatment of bladder malignancy, and he replied: That the treatment consisted chiefly in opening up the bladder and using an actual cautery; the actual cautery that they used was a soldering iron. The cases were later treated with deep X-Ray therapy. X-Ray therapy controls hemorrhage which is important for the physical effect on the patient.

DR. KILBURN (closing): I wish to thank the Society for the gracious response accorded to this paper. I expected to be severely handled. If any effect is to come from X-Ray therapy in cancer of the bladder it ought to be preceded by something like excision or cautery. Excision with the cautery knife and cauterization of the base of growth is probably the best treatment. The idea of treatment of bladder tumors by deep X-Ray therapy came to me from the results obtained by general surgeons in treating cancer of the breast, by excision of the breast on the side affected and following such by deep X-Ray therapy.

THE St. Andrews Institute for Clinical Research, Scotland, founded by the late Sir James Mackenzie, will henceforth be known as the James Mackenzie Institute for Clinical Research, in honor of the founder. An endowment of \$300,000 is being raised to carry on the work of the institute.—*Science*.

DANA MEDAL FOR PREVENTION OF BLINDNESS AWARDED TO DR. EDWARD JACKSON

AN important event in the prevention of blindness movement occurred in St. Louis on the evening of May 20 when the Leslie Dana Medal was awarded to Dr. Edward Jackson of Denver, Colorado. The Leslie Dana Medal is to be awarded each year for the most outstanding achievements in prevention of blindness and saving sight. The fund for providing the award was established by Mr. Leslie Dana of St. Louis, a retiring member of the Missouri Commission for the Blind, as the result of the Missouri Commission's experience in administering the Missouri Pension Act and in conducting welfare work for the sightless. Records in the Commission's office show that over 2,000 of Missouri's 6,000 blind are needlessly blind. The person to receive the medal will be selected each year by the National Committee for the Prevention of Blindness in cooperation with the Missouri Commission for the Blind.—*The News Letter*.

CHILE HAS A SOCIAL HYGIENE LAW

THE Republic of Chile has recently enacted legislation for the control of venereal diseases. The law establishes a Division of Social Hygiene with three departments—Education, Control, and Healing. The various functions of this Division are definitely outlined.

The Department of Education is held responsible for special propaganda, for the study of educational programs, for the creation of social hygiene professorships in the medical schools, institutes, and normal schools, and for suggestions in elementary social hygiene instruction to be included in general public education. The Department of Education is also to direct the control and repression of prostitution, watch over the specialists in venereal diseases, and to watch over the practices of public and private laboratories in investigations connected with the bacteriological and serological diagnosis of social diseases.—*United States Public Health Service*.

Of the 70 cities reporting for the four-week period, ending May 23, 1925, the following 10 show no fatalities: Camden, Des Moines, Fall River, Lowell, Lynn, New Bedford, Richmond, Somerville, Tacoma and Yonkers.

New Bedford is the only city which shows no such fatalities so far this year.

WHAT IS MENTAL HYGIENE?

MENTAL HYGIENE aims to maintain and foster health, mental as well as physical, and to prevent mental disease and disorder. In other words, to bring more efficient living to our people is its main goal.—*Bulletin Massachusetts Society for Mental Hygiene*.

Case Records
of the
Massachusetts General Hospital

ANTE-MORTEM AND POST-MORTEM RECORDS AS USED IN
WEEKLY CLINICO-PATHOLOGICAL EXERCISES

EDITED BY

RICHARD C. CABOT, M.D., AND HUGH CABOT, M.D.
F. M. FAINTER, A.B., ASSISTANT EDITOR

CASE 11271

MEDICAL DEPARTMENT

A Nova Scotian lady's maid of fifty-three entered December 12. Her general health had been excellent. She had had no serious illnesses. Her father died of Bright's disease.

A year before admission she had an attack similar to the present one but less severe. The morning before her admission she had sudden sharp pain in the right lower quadrant, well localized. The pain had persisted, dull, with occasional sharp exacerbations. She vomited several times that night and four or five times the day of admission. Her bowels moved once December 11, but not well. They were usually constipated.

Examination was negative except for a large non-fluctuant mass in the right lower quadrant, slightly movable. On bimanual pelvic examination a hard mass, not tender, was palpated in front of the uterus and to the right of the median line, apparently ovarian. There was second degree retroversion.

At operation December 13 a black and gangrenous ovarian cyst with a twisted pedicle was removed. It weighed 1575 grams, measured 12 by 15 by 16 cm., and was preserved *in toto* as a museum specimen. After three days of gas pain the patient made an entirely uneventful convalescence and was discharged with the wound clean and solid December 29.

January 30, six years later, she returned complaining of jaundice, stomach trouble, and a growth in the breast.

Five weeks before admission she went to bed with a severe cold which she had tried unsuccessfully to fight off. Two weeks later she called a physician to treat the cold. On examination he noticed a growth in her right breast for which he advised operation. She had been aware of this since early the previous summer. A week after this he discovered that she was jaundiced. At this time she began to vomit sour vomitus four or five times a day, usually within five minutes after eating, also between meals.

Examination showed a well nourished woman with jaundiced skin and sclerae. In the region of the posterior triangle of the neck on the right side were five or six hard bean-sized

glands, on the left side three or four hard pea-sized glands. In the right breast surrounding the nipple was a definitely circumscribed hard mass, irregular and nodular. The nipple was retracted. Pressure on the epigastrium gave a feeling of discomfort. Both legs showed bony prominences just below the tibial tubercle.

The temperature was 97° to 99.9°, the pulse 82 to 130, the respirations 20 to 36. The urine was dark or moderately brown at all of three examinations, cloudy at one, showed a large trace to a trace of albumin at two, bile at all, twice in large amounts. The amount was normal when recorded. The specific gravity was 1.024 at one; the quantity was insufficient for the test at the other two. The hemoglobin was 80 per cent., the leucocytes 10,500, the polynuclears 68 per cent. No Wassermann is recorded. The non-protein nitrogen was 44 to 48 mgm. per 100 c.c. The blood sugar was 123-192 February 2, 123 February 4. The hyperglycemia was believed to be related to glucose subpectorals. The clotting time was 7 to 17 minutes. The plasma was moderately tinged with bile. The cell volume was 46 per cent. The uric acids were 4.7 per cent. The creatinin was 1.5 per cent. X-ray showed general haziness throughout both lung fields. The diaphragm was unusually high on the right. The root shadows were increased in size, particularly on the right. The plate was unsatisfactory. No definite conclusions could be made.

The patient became slowly more and more apathetic. February 1 she was somewhat irrational. The jaundice seemed perhaps deeper. The abdomen was distended and showed shifting dullness. She vomited nearly everything taken, and was put upon rectal taps. The stools were clay colored. February 2 she was practically comatose and showed peculiar twitching of the hands. A medical consultant reported, "Slight dullness at the left base. I cannot make out marked liver enlargement. . . . The patient seems to me to be in a cholemic condition." She sank slowly, continuing in coma. The jaundice seemed to deepen. February 3 the stools were still clay colored, though bile was present by chemical test. Guaiac was strongly positive. Bile was present also in the urine. Small amounts of urine were obtained by catheter every hour. She took practically no fluids by mouth and did not retain taps. Daily subpectorals of saline and glucose were given. She sank deeper into coma. The abdominal distension increased. February 4 she died.

DISCUSSION

BY DR. RICHARD C. CABOT

NOTES ON THE HISTORY

Her discharge December 29 is the end of the first chapter.

At her second admission the patient's age is fifty-nine and she has had this growth in the right breast for six months.

NOTES ON THE PHYSICAL EXAMINATION

Without something more specific one cannot make anything in particular of these shins, I should say.

The urine contained bile presumably, but showed nothing else except the effect of the bile.

The non-protein nitrogen is a little high, but not high enough for us to draw any particular conclusions.

The blood sugar is also slightly high. The total result of all these tests I should say was nothing of particular significance.

DIFFERENTIAL DIAGNOSIS

I suppose there is no reason to doubt that she died of cancer of the breast with metastases in or perhaps about the liver obstructing the exit of bile. Where else there may be metastases I do not know. Whether she has any in the lungs, for instance, we cannot tell from the X-ray plate, and we have no other symptoms. I do not see that we have anything to guide us towards any suspicions of metastases elsewhere. She certainly has them compressing the biliary tract. She might have them in the pancreas, but secondary are not very common and we have no reason to think there is any other primary except in the breast or in and about the breast. I have no considerable doubt that there are nodules in the liver itself. Where else they may be I cannot say.

DR. RICHARDSON: What was the clinical observation with regard to loss of weight?

DR. CABOT: The record says "well nourished."

CLINICAL DIAGNOSIS (FROM HOSPITAL RECORD)

Carcinoma of breast.
Jaundice.

DR. RICHARD C. CABOT'S DIAGNOSIS

Carcinoma of the breast, with metastases in the liver.

ANATOMICAL DIAGNOSIS

1. Primary fatal lesion

Carcinoma of the stomach with metastases in the liver, gall-bladder, bile ducts, retroperitoneal and other lymph nodes and in the right breast.

2. Secondary or terminal lesions

Icterus.
Ascites.
Hydrothorax.

3. Historical landmarks

Slight arteriosclerosis.
Fibromyomas of the uterus.
Scar of old operation wound.

DR. RICHARDSON: She was fairly well nourished. The head was not examined. In the right breast was a firm, flattened, hemispherical mass seven by four cm. showing on section new-growth-like tissue. The left breast was negative. In the right axilla were a few slightly enlarged glands. The peritoneal cavity contained about 1500 c.c. of bile-stained fluid. The conjunctivae and skin showed a well marked yellowish discoloration.

The stomach was small. In the region of the posterior wall there was a long broad strip of new growth tissue. The pylorus was negative; the intestines were negative. The retroperitoneal glands were moderately enlarged and showed infiltration with new-growth-like tissue.

Each pleural cavity contained about 1500 c.c. of thin bile-stained fluid, no adhesions. There were no metastases in the lung tissue.

The pericardium was negative. The heart was a little large, but the valves and cavities were negative. There was a moderate amount of fibrous sclerosis in the aorta and a slight amount in the great branches.

The liver showed scattered over the surfaces smaller and larger metastases and the liver tissue itself was thickly studded with metastases. Down along the bile-ducts there were masses of new-growth, and these constricted the ducts and were of course the cause of the icterus. There were metastases also in the wall of the neck of the gall-bladder.

DR. CABOT: Were these presumably in the lymph glands?

DR. RICHARDSON: Yes, and in the bile ducts. In the uterus there were four fibromyomas, but no other masses of new growth. The new growth was regarded as being a carcinoma of the stomach with the metastases mentioned.

CASE 11272

SURGICAL DEPARTMENT

A Scotch-American widow of seventy-one entered December 26 complaining of a lump and pain in the stomach of ten days' duration. Her first husband died of consumption when she was twenty-six. She had always been well, remembered no diseases. Ten years before admission she weighed 222 pounds, her best weight. Her usual and present weight was not known but was less than that.

For two years she had had "rheumatism" of the legs with pain running down the hips to the knees. The knees became stiff and painful to move. She used canes to walk. At about the same time she felt that her stomach was sore

and dragged as she walked up stairs. This sensation had gradually grown more severe. A year before admission she began to be troubled by gas, especially after meals. This also had grown progressively worse. After eating she had sour stomach, relieved by soda mint tablets. December 16 she suddenly was unable to finish her luncheon, and felt as if a great lump were rolling about in her stomach. She could eat only crackers and milk, and very little of that. Paroxysms of pain came on with meals or at any time after meals, especially if she moved about much. December 21 she noticed that her urine was very high colored. At this time she began to vomit, especially during attacks of pain, with relief. The vomitus was thick dark brown slimy material, often coffee-grounds. December 23 someone noticed that she was jaundiced. The pain had become more severe and the vomiting more frequent. During the history taking she had an attack of pain referred to the epigastrium and radiating to a point between the shoulder blades.

Examination showed an obese old woman, deeply jaundiced. The forehead showed a bone projection due to old trauma. The teeth were decayed. There was marked pyorrhea. The apex impulse of the heart was not found. The midclavicular line was $7\frac{1}{2}$ cm. from mid-sternum, the left border of dullness 11 cm. The right border is not recorded. The action was regular, the sounds of poor quality. A rough systolic murmur was heard, loudest at the apex. The artery walls were palpable and tortuous. The lungs are not recorded. The abdomen was negative. Pelvic examination showed profuse leucorrheal discharge, excoriation of genitals and thighs, old adhesions in the vaults, the cervix very small and short. Rectal examination showed a hard mass on the posterior wall, probably fecal. The legs were slightly edematous. There was a depressed scar of the varicose ulcer type the size of the palm on the left lower leg. There were many varicosities on the legs. The pupils were normal. The knee-jerks were not obtained.

The temperature was 97° to 98.4° , the pulse 92 to 70, the respirations normal. The urine was normal in amount, the specific gravity 1.016-1.020, the slightest possible trace to a slight trace of albumin at all of three examinations, much bile and occasional leucocytes at all, loaded with red blood cells at the first, some at the second. The hemoglobin was 85 per cent., the leucocytes 11,200, the polynuclears 89 per cent., the reds and platelets normal. The serum dilution December 27 was 1:260, December 31 1:500. The clotting time December 27 began in 12 minutes and was complete in 14 minutes, December 31 began in 7 minutes and was complete in 13 minutes. A Wassermann was negative. X-ray showed no evidence of gastro-intestinal pathology.

For the first day the jaundice seemed to be slightly less. December 29 it seemed deeper. Dr. Chester Jones and a surgeon both inclined to a diagnosis for which the surgeon advised operation.

The morning of January 3 operation was done. The patient was conscious at seven p. m. At ten o'clock she developed a rattle in the throat and became stuporous. Early the next morning she died.

DISCUSSION

BY DR. MAURICE FREMONT-SMITH

NOTES ON THE HISTORY

Of course we can have pain in the upper part of the leg and lower back from fallen arches, and it is well to remember that fallen arches do not necessarily give pain in the feet. Of course the fact here that her knees became stiff and painful to move suggests that she had a definite arthritis of the knees, and possibly if she was developing that she was also developing an arthritis of the spine which might account for the pains down the thighs. It is also well to remember that pains down the thighs, especially both sides and especially if it is sciatica, are often caused by intra-abdominal or pelvic tumor, in a man by cancer of the prostate. That is very often the cause of sciatica of supposedly unknown origin. A large pelvic tumor in a woman will also cause pain travelling down the thighs.

If we had here a story of dyspnea we should say that all these symptoms might go with chronic passive congestion,—the indefinite pain in the abdomen, the dragging sensation from a large liver with a stretched capsule, the eructations of gas and sour stomach as a result of chronic passive congestion of the mucosa of the stomach. It is quite evident that this woman was not taking much exercise. It is possible that the element of chronic passive congestion does enter in here and that we should get dyspnea if she did exercise. Still, with enough chronic passive congestion to cause these symptoms we should expect some pretty definite dyspnea and edema.

There is nothing characteristic about the paroxysms of pain.

The observation of "coffee-grounds" if correct is of course very important, meaning that she was bleeding into her stomach.

NOTES ON THE PHYSICAL EXAMINATION

She had enlargement of the heart. This is the picture of a sclerotic heart. The omission of the lung examination is pretty important. We should learn a lot about the heart if we knew that there were or were not râles at the bases.

With a woman weighing 222 pounds or something less there may be a good deal in the ab-

domen that one does not feel. There may be fluid. We should like very much to know what her present weight is and how much she had lost within the last six months.

Evidently the fundus was not felt.

It is easy enough to say here that it should have been possible to determine whether the mass was fecal or not, and that it is of a good deal of importance to us to know. But evidently it was not easy to determine.

DR. CABOT: Isn't *posterior* here a mistake for *anterior*? How can there be a fecal mass on the posterior wall of the rectum?

DR. FREMONT-SMITH: It would be pretty hard, I should think, to have a fecal mass immobile on any wall of the rectum. Perhaps it was at the very tip of the finger.

The scar was of the "varicose ulcer type" probably because of its position in the lower third of the leg rather than the upper third, where the luetic ulcers are more apt to appear. Or perhaps one should say that the luetic ulcer is apt to appear anywhere and the varicose ulcer more likely to appear in the lower third.

Knee-jerks are often difficult to obtain in very obese and edematous people. The ankle-jerks would have told us more than the knee-jerks and should have been demonstrable.

Red blood cells in the urine is a finding that cannot be overlooked. Pus might well have come from a leucorrheal discharge. Perhaps the red cells did. Certainly we should have had a catheter specimen. Assuming them to come from the kidneys we might fall back upon chronic passive congestion, but we should expect to have more albumin. If we do not feel that chronic passive congestion explains it we should have to investigate those kidneys further. I suppose, in the light of the fact that she was so deeply jaundiced, that evidently was the striking part of the picture and the kidneys were considered secondary.

The serum dilution shows a very great deal of bilirubin. The normal I believe is one to twenty-five to forty.

A PHYSICIAN: I think we consider now that it should be one to twenty to be normal.

DR. FREMONT-SMITH: There is normal clotting time. It is well to remember that clotting time is always shortened by any mistakes in technique, that it appears always shorter probably than it actually is.

On the strength of the X-ray we can disregard the "coffee-grounds," although of course we do get hemorrhage of the stomach from ulcers, or perhaps from diffuse bleeding of the stomach wall, in which the X-ray picture is negative. But certainly she had no carcinoma of the stomach.

DIFFERENTIAL DIAGNOSIS

Deep jaundice in a woman of seventy-one usually means carcinoma, of the bile-ducts themselves, of the head of the pancreas press-

ing on the bile-ducts, or metastatic carcinoma, from the stomach or elsewhere, in the liver; and, of course, we have to consider the other good possibility, that is, stone. I suppose that it was the diagnosis of possible stone that led to the advice for operation.

Against carcinoma and in favor of stone here is the fact that she had pain. Painless jaundice is usually the jaundice that one finds with carcinoma of the head of the pancreas. On the other hand one may have indefinite attacks of pain in carcinoma of the pancreas explained as pressure on the celiac plexus. Against stone here is her age, the fact that she had never had any previous attacks of gall-stone colic, and the fact that her temperature is normal. That I think is quite a point against stone. Usually one will get some fever in longstanding jaundice, certainly if it is due to stone in the common duct.

Of course we should expect her to have lost considerable weight if she had a carcinoma. She has had some sort of gastric symptoms for a year at least. On the other hand I think we can perhaps get around that by saying that she had a certain amount of chronic passive congestion and that the carcinoma became active, so to speak, a shorter time ago.

One has to mention the fact that catarrhal or infectious jaundice does occur in old people as in young, but much more rarely, and of course acute yellow atrophy will give a deep jaundice. But the patient is usually a great deal more sick. We did see here not very long ago, however, a patient of about fifty who was very comfortable in the wards for about twelve days, had no pain and was not sick. We thought of catarrhal jaundice and of possible stone, and I believe on the basis of a history of pain in the past we decided it was wise to operate. At operation she had yellow atrophy of the liver and died the second day after. I mention that to bring out the fact that the first few days of yellow atrophy may not be very acute.

Our ideas of jaundice have changed somewhat in the last few years. We used to divide it into two definite classes, (1) obstructive jaundice, which we considered was the group in which there was obstruction to the flow of bile out of the liver and the bile was absorbed into the blood stream with jaundice as the result of that absorption, and (2) hemolytic jaundice, in which we assumed the jaundice to be caused by excessive blood destruction. Now we consider the liver as a filter. The bile is probably formed in the blood or possibly in the spleen. It is not formed in the liver cells and excreted, as we have been taught, but is found elsewhere in the body and filters through the liver cells into the biliary system when the concentration of bilirubin in the blood reaches a certain level. If filtration through the liver is interfered with jaundice results.

We have therefore to assume some sort of

definite liver damage when we get jaundice of any type. In the jaundice of acute yellow atrophy the liver cells are so acutely damaged that bile cannot pass out of the blood by way of the liver; in the jaundice of gall-stones in the same way we assume injury to the liver cells through back pressure. This view enables us to picture jaundice simply as a backing up in the blood of bilirubin, an inability of the liver to get rid of bilirubin, which then rises above its normal value in the blood stream.

I feel that in this case we are going to find carcinoma, probably of the head of the pancreas. The second possibility is stone.

PRE-OPERATIVE DIAGNOSIS

- (1) Malignant disease of the pancreas.
- (2) Stone in the common duct.
- (3) Infectious jaundice.

OPERATION

Local novocain. Ether (only about four ounces). The liver was found to be exceedingly small. The right lobe could be covered by the hand. The left lobe was about 2½ inches in length by 2 inches at its widest part. The gall-bladder was distended, of normal color and thickness. It was aspirated and a moderately thick, very dark bile was found. No stones could be found in the gall-bladder or ducts. No evidence of malignant disease was found. A cholecystgastrostomy was done to make sure that the jaundice would be relieved.

POST-OPERATIVE DIAGNOSIS

Cirrhosis of the liver?

CLINICAL DIAGNOSIS (FROM HOSPITAL RECORD)

Jaundice.

Cirrhosis of the liver?

Terminal bronchopneumonia.

Operation, anastomosis of gall-bladder and stomach.

DR. MAURICE FREMONT-SMITH'S DIAGNOSIS

Carcinoma of the head of the pancreas?
Cholelithiasis?

ANATOMICAL DIAGNOSIS

1. *Primary fatal lesion*
Yellow atrophy of the liver.
2. *Secondary or terminal lesions*
Arteriosclerosis.
Arteriosclerosis
Hypertrophy and dilatation of the heart.
Icterus.
3. *Historical landmarks*
Operation wound.
Omental hernia.
Chronic perisplenitis.
Small uterine fibromas.

DR. RICHARDSON: The skin generally showed a pale brownish-yellow color, and there was discoloration of the conjunctivae,—icterus.

The peritoneal cavity contained a small amount of thin rather dark bloody fluid. An anastomosis was established between the gall-bladder and the stomach, and was in good condition.

The stomach contained a moderate amount of dark bile-like fluid. The mucosa and pylorus were negative. The mucosa of the small intestine showed a few hemorrhagic areas. The large intestine showed areas and streaks of reddening. The intestines otherwise were negative. There was a small omental hernia in the region of the umbilicus.

There seemed to be no discussion as to the liver levels in the history.

DR. FREMONT-SMITH: No. The patient was evidently so fat that it was impossible to palpate.

DR. RICHARDSON: The liver margin was two and a half centimeters above the costal border.

The lungs were negative. There were scattered hemorrhagic areas in the pleura.

The heart weighed 380 grams, slightly enlarged for her. The myocardium was rather lax, toneless. The valves were negative. They showed of course the usual amount of sclerosis that is present at this age. The aorta and great branches generally showed well marked arteriosclerosis, fibrous and fibrocalcereous.

The liver weighed 730 grams,—very small. Much of the tissue of the organ, best marked in the region of the right lobe, consisted of golden-brown, rather soft tissue with smaller and larger irregular areas here and there of dark red tissue yielding a thin bloody fluid. This tissue gave way, toward the peripheries, to a dark red, somewhat leathery tissue yielding thin red fluid. The edge of the liver was thin and knife-like and the capsule showed some fine wrinkling. A characteristic picture of yellow atrophy.

The spleen showed some congestion and chronic perisplenitis.

DR. CABOT: What was the clinical diagnosis?

DR. RICHARDSON: Jaundice, cirrhosis of the liver, terminal bronchopneumonia.

DR. FREMONT-SMITH: Have you ever seen acute yellow atrophy in so old a person?

DR. CABOT: No. I think this is a striking fact which I have mentioned before. Twice within a few weeks we have discussed acute yellow atrophy here. We used to go two, three, four years at a time without ever seeing a case. Something has certainly happened whereby we are getting three or four times as many cases as we used to see.

[Note. Several weeks after the patient's death the association of rheumatism with death from acute yellow atrophy of the liver, ob-

served in four other cases seen here at necropsy during the past three years, was noticed. (See Cases 9041 and 9042, published January 23, 1923, Case 11203, May 14, 1925, and Case 11231, June 4, 1925; also compare Case 11211, May 21, 1925.) In all these cases the patients had taken "Weldona." Inquiries were made among the patient's friends, who said that since the spring before her death she had taken six or eight boxes of "Weldona," and before that had taken some.]

CASE 11273

SURGICAL DEPARTMENT

A divorced American woman of sixty-four entered February 24 for study. The chief complaints were vomiting and pain in the right upper and left lower quadrants. It was found that she told very inconsistent stories, so that the entire history was unreliable. The neurotic element in her case was undoubted. Her mother died at seventy-four of heart disease, one sister of tuberculosis, another of cancer, one brother of nephritis. The patient had always been strong and healthy. At nine years, twelve years and twice later she had had acute rheumatic fever. At twenty-seven she had influenza. At forty, after the death of a sister, she had a series of "jumping spells" during which she was unable to feed herself. Her description did not sound like chorea. She was sometimes rather dyspneic on climbing one flight of stairs, requiring four or five minutes to regain a normal respiration.

Two years before admission she began to have insidious onset of sick headaches, a general feeling of ill being, fatigability, and vomiting of watery material half an hour to two hours after meals. She had slight vague abdominal pains. A year before admission she began to have severe abdominal pain and also epigastric discomfort and pain in the right side a few minutes after eating and at other times, relieved by vomiting. Nine months before admission she began to regurgitate her food at times and to vomit after meals without feeling nauseated. The vomitus had occasionally been dark brownish, possibly coffee-ground-like. During the past year she had had probably twelve attacks of sharp pain radiating from the right upper quadrant to the right side and back, never severe enough to require a sedative. She had also a more or less continuous dull ache in both the right and the left sides, not radiating. She denied having been jaundiced, but had been told two years and a half before admission, some six months before the vague onset of her illness, that she was very brown. In the November before admission she had had much tenderness beneath the right and left costal margins. This had grown much bet-

ter. The vomiting had grown more frequent; for a month she had vomited at least once a day, and now had as many as five attacks a day. During the past nine months she had lost eleven pounds. During the past two years she had lost a great deal of strength and had aged rapidly. Her bowels had been much more constipated, particularly during the past winter.

Examination showed kyphosis, left dorsal scoliosis and lumbar lordosis. The left shoulder was higher than the right, the left back more posterior than the right. The tongue protruded with coarse tremor. There was dullness at the top of the left lung posteriorly. The abdomen was full. There was tenderness in the right upper quadrant. The liver was not palpable. She relaxed poorly. Pelvic examination showed the uterus retroverted. The pupils were slightly irregular and reacted to light and distance through rather a small arc.

The temperature was 97° to 98.6°, the pulse 68 to 114, the respiration normal. The urine showed the slightest possible trace of albumin, specific gravity 1.018. The amount is not recorded. The sediment was loaded with pus. The hemoglobin was 75 per cent. There were 12,700 to 10,400 leucocytes, 66 per cent. polynuclears, 4,100,000 reds of fair color, otherwise normal. A Wassermann was negative. The stools were clay colored; guaiac was negative. The vomitus gave a very slightly positive guaiac. X-ray showed considerable increase in the lung markings, more prominent toward the base, indicating chronic fibrosis. The left diaphragm was a little high, presumably pushed up by a large amount of gas in the stomach. The respiratory motion of the diaphragm was good on both sides. There was no evidence of any apical involvement. There was also no evidence of gall-stones. The stomach was low and atonic. There was no definite evidence of organic disease in the stomach or duodenum. March 2 gastric analysis showed 75 c.c. of fasting contents, clear yellow fluid with a few flecks of red blood, 5 c.c. of hydrochloric acid, total acid 18, guaiac strongly positive, occasional leucocytes and red blood corpuscles. A test meal gave 60 c.c. of fluid with thick white sediment, 15 c.c. of hydrochloric acid, total acid 41 c.c., guaiac negative. Lumbar puncture gave 10 c.c. of clear colorless fluid, initial pressure 120, final pressure 65, dynamics normal, one cell, Wassermann negative, ammonium sulphate and alcohol positive, goldsol 0000110000.

A surgical consultant did not make a definite diagnosis but advised exploration. March 3 operation was done. She made a fairly good ether recovery, but vomited every day for the next five days and occasionally afterwards, depending on rectal taps and subpectorals for fluids. She had little interest in her own recovery. March 12 she required a stomach

wash which yielded about thirty ounces. After it she looked and felt much better, though for several days she had been complaining of soreness of the left calf, which showed swelling, induration and tenderness. There was no fever. March 17 the swelling and tenderness were much reduced and she felt fairly well and had been up in a chair for several days. March 19 she was allowed to rest the right leg on the floor. She fell down, complained of faintness, and in twenty minutes died.

DISCUSSION

BY DR. EDWARD L. YOUNG, JR.

I should imagine that her description did not sound like anything diagnosable.

Of course her dyspnea could possibly be hitched up with her three or four attacks of rheumatic fever, although it is the only thing mentioned suggestive of abnormality of the heart.

In other words, what she said was not worth anything. I suppose all this is her story, so that if her stories are grossly inconsistent the examination and the various tests that can be done are more important than anything else. Because of course one of the necessary factors in making a diagnosis on the history is an intelligent patient, and here we have apparently just the opposite.

If we could put faith in this story of pain, the story itself is of considerable help in making the diagnosis.

MISS PAINTER: She told that story to several people, and at one time said it was hard enough to make her cry out.

DR. YOUNG: The pain sounded consistent. The fact that she told the same story to several people is important, because I think there is one fact in the examination of the so-called neurasthenics that is very important. If a patient today has got a pain here and tomorrow has a pain a little way away from that, so that although, let us say, the pain is always abdominal it varies in its location, that pain would better be discounted. But if in spite of lack of corroborative evidence a patient persists in saying that a given pain or soreness is always the same and always in the same spot, that pain ought to be taken seriously.

MISS PAINTER: This patient came to the Out-Patient Department in August before admission complaining of the same pain in the right upper quadrant, of three months' duration.

DR. YOUNG: I think we can throw out all the rest of her history, if we will except a very indefinite story of something wrong for one or two years, and accept only as accurate the fact that she has had pain in the right upper quadrant radiating to the side and back. Of course that pain can be due to a great many different things, because the right upper quadrant is

notoriously a place where anything from gall-stones to kidney stones, from anginoid attacks to referred central nervous system pain, can happen.

The urine was not stated to be a catheter specimen, so that we have to discount that. Although it may mean something it is more likely not to mean anything.

"The stools were clay colored." There is a specific fact which has to be explained.

I wish I knew what they meant by this X-ray report, because today there are a good many things that the X-ray can help us about. The shadow of a gall-stone of course is not a common finding, but evidence of whether or not the stomach or duodenum is adherent to or indented by or pulled toward the area where the gall-bladder normally is is suggestive evidence, and of course today we are using the sodium tetraiodophthalein—I do not know what short name will be given it—the Graham test perhaps. I believe it is of great help in telling whether a gall-bladder is normal or is not normal. So that we do not know just how many of those things are included in this report of "no evidence of gall-stones."

The few flecks of red blood may well be due to the stomach tube. The examination does not tell us very much. What are the possibilities? What are the things that we are going to stick to as influencing our decision? The story that she tells we shall have to throw out of court very largely except for the pain. She stuck to that from the Out-Patient to the House,—pain in the right upper quadrant radiating to the right side and back, coming on definitely in attacks. There is certainly an atypicality of the nausea, vomiting, and pain if we take it in relation to an ulcer, because she was in here a week and they had a chance to observe her somewhat. Moreover the X-ray does not show any evidence of stomach or duodenal trouble.

She has clay colored stools. Clay colored stools mean a blocking of the bile going into the duodenum, or else a total absence of bile secretion, which is of course essentially the blocking in the fine ducts. Now the mechanical blocking can be due to a stone in the common duct. That is consistent with the attacks of pain, but she could be jaundiced, and there is no mention here that this woman is jaundiced.

MISS PAINTER: The color is definitely checked as normal.

DR. YOUNG: So that rather rules out a liver which is secreting bile and not getting it into the intestine. In other words, it seems as though we could rule out a stone in the common duct or a carcinoma of the head of the pancreas or an inflammatory process severe enough to cause complete obstruction, unless that has gone on long enough so that the liver has stopped manufacturing bile, because after a long enough time of back pressure the kidney

will give up the job and there will be found in the bile ducts only a clear mucous secretion.

With this story going back as far as it does can we say that she has a hepatitis which now is acute yellow atrophy? I do not think that we have, so far at least, any of the acute symptoms of toxemia that we should expect to go with that. I think I may have to agree with the surgical consultant in saying that with a perfectly clear skin and clay-colored stools I certainly would advise operation, but I do not know what I should find. The only logical thing, it seems to me, is to say that there has been a stone, that she has had jaundice which she has not recognized or because of her mental condition has forgotten, and that there is now a liver that is not secreting. And I feel very much like saying, with the farmer at the circus, "There ain't any such animal." I should advise operation, but I do not think I can say any more than that.

A PHYSICIAN: You see there is only sixty-six per cent. of polynuclears.

DR. YOUNG: I do not think that amounts to anything.

They are going to operate on the same basis that we should, because there ought to be something wrong and it is possible that there may be a condition which can be helped.

DR. YOUNG'S PRE-OPERATIVE DIAGNOSIS

Gall-bladder disease?

PRE-OPERATIVE DIAGNOSIS

Gall-bladder disease?

OPERATION

Gas-ether. Incision through the right rectus. The gall-bladder was found to be very adherent, normal in color. No stones were felt. There was no evidence of any inflammatory process. The stomach and duodenum were low, the stomach somewhat dilated, reaching down to the pelvic brim. The transverse colon was large, free, lying very low in the pelvis. The hepatic flexure was adherent to the ascending colon and cecum, forming a U. These adhesions were freed, showing the whole cecum and transverse colon in a typical dilated ptotic looking condition. The appendix was atrophied and fibrous and was not removed. In the splenic flexure were also adhesions of the transverse colon to the descending colon, forming another U. These were all freed. The surgeon thought these adhesions were not congenital. In the right iliac fossa the cecum was tied down with more than the usual number of fan-like adhesions to the abdominal wall. No lesion in the abdomen was found except a dilated and ptotic large intestine and a ptotic stomach.

FURTHER DISCUSSION

This does not say a word about the liver itself, so I assume that it was normal in appearance. Assuming all these facts to be true, again I must insist that there is no such condition.

The swelling and soreness in the left calf was just a thrombosis, presumably.

Unless someone has some suggestion I am going to let Dr. Richardson try to explain this case, because the facts as given certainly do not fit together. They are paradoxical.

CLINICAL DIAGNOSIS (FROM HOSPITAL RECORD)

Exploratory laparotomy for question of gall-bladder disease, no pathology other than adhesions found.

Pulmonary embolism.

Phlebitis of the left leg.

DR. EDWARD L. YOUNG'S DIAGNOSIS

Unknown cause of death.

Phlebitis of the left lower leg.

ANATOMICAL DIAGNOSIS

1. Primary fatal lesion

(Unknown.)

2. Secondary or terminal lesions

Operation wound.

Thrombophlebitis of the left femoral and iliac veins and first portion of the inferior vena cava.

Pulmonary embolism.

Small aneurism of a branch of the splenic artery.

DR. RICHARDSON: A well developed, fairly well nourished white woman, the skin generally pale. The left lower extremity was considerably larger than the right. No definite edema was made out except for a slight amount over the tibia. There was an operation wound in the lower abdominal wall, and on the posterior aspect of the left thigh some brownish swelling, and in the region of this an indefinite purplish streak. The abdomen was not distended. The wall was soft.

The heart weighed 245 grams, the valves and cavities negative except for dilatation of the right cavities. The coronaries were free and negative. The right side of the heart, when it was opened, contained a large amount of fluid blood distending the right cavities up to the pulmonary valve. That is a picture that we find with pulmonary embolism. In the pulmonary artery in this case there was a large frank embolic mass consisting of branching columns of thrombotic material, a definite pulmonary embolism. The aorta and great branches showed a slight amount of fibrous sclerosis, and a branch of the splenic artery a short distance

from the spleen presented a small aneurism one and a half centimeters. The artery proximal and distal to this was negative. These aneurisms of the splenic artery are not unusual. In one case a while ago we found three of them. They are not very large and they seem to cause no trouble.

The pulmonary veins and venae cavae were negative except that in the inferior cava just above the junction of the common iliaes there was a frank thrombotic mass which extended from there down along the left iliaes to the femoral vein,—a frank thrombophlebitis, the source of the embolus in the pulmonary artery.

The spleen was a little soft. There were a few small fibromyomata of the uterus.

Culture from the heart blood yielded no growth.

DR. YOUNG: There was bile in the gall-bladder and the duct was free. Then that one statement of clay-colored stools must have been wrong.

MISS PAINTER: It was recorded three times, once with a question, twice positively.

DR. YOUNG: True clay-colored stools do not come from anything other than an absence of bile, so that it seems to me there must have been something wrong. We shall accept the facts and insist that "there ain't no such animal."

A SURGEON: Could a milk diet have given the clay-colored stools?

DR. YOUNG: The stools can be very light colored, but to be truly clay-colored it has to be the absence of bile.

MISS PAINTER: She did not have a milk diet in the hospital. She had a high carbohydrate diet.

DR. YOUNG: She had a varied diet as a matter of fact.

DR. RICHARDSON: The case came down to me with a definite clinical diagnosis of phlebitis of the left lower extremity and pulmonary embolism.

INFANT MORTALITY FOR 1924

NEW YORK, June 22.—The baby death rate in the cities of the United States for last year reached the lowest point ever attained. According to the infant mortality report published annually by the American Child Health Association, New York City, the combined rate for 629 cities in the Birth Registration Area was 72.2 as compared with a rate of 78 for 1923. These figures indicate that 72 babies out of every one thousand born during 1924 died within their first year.

The Birth Registration Area of the country consists of 33 states and the District of Columbia. There are 638 cities of ten thousand or more population according to the 1920 census within the area. The report includes returns

from 98.6 per cent. of these cities. The Birth Registration Area was increased by the addition of three states in 1924, namely, Florida, Iowa and North Dakota.

The lowest rate of all the cities in this area is credited to New Philadelphia, Ohio, a city of about eleven thousand population. The rate was 25.

The report discusses the cities by size: Of the largest cities, those of 250,000 population or more, Seattle, Washington, is low with a rate of 45; Minneapolis, Minnesota, and Portland, Oregon, stand second and third each with rates of 54.

In the group with populations from 100,000 to 250,000, Cambridge, Massachusetts, has the best record with a rate of 42; Spokane, Washington, is second with 52; and Grand Rapids, Michigan, third with 53.

Long Beach, California, stands first among the cities of 50,000 to 100,000. Its rate is 41. Berkeley, California, is second with 51, and Brockton, Massachusetts, third with 53.

Oak Park, Illinois, with a rate of 29, Brookline, Massachusetts, and Revere, Massachusetts, each with a rate of 30, are the leaders in cities of from 25,000 to 50,000 population.

In the smallest cities, from 10,000 to 25,000 population New Philadelphia, Ohio, has a rate of 25; Cuyahoga Falls, Ohio, 29, and Dedham, Massachusetts, 29.

Of the ten largest cities in the Birth Registration Area, Los Angeles is low with a rate of 66.0, a mere shade in advance of Cleveland with 66.1. New York City stands third with a rate of 68. The other cities in order are Boston 74.7; Philadelphia 75.2; Chicago 77; Detroit 79; Buffalo 84; Baltimore 85; and Pittsburgh 92.

The urban rates for the states show Oregon leading with a rate of 51.4; Washington 51.6; Minnesota 55.7; Utah 58.6; California 62.4 and Massachusetts 64.8.

Of thirty states whose urban records have been available the last two years 26 show reductions in infant mortality in 1924 as compared with the previous year.—*American Child Health Association.*

THE CONQUEST OF TYPHOID FEVER

FOUR decades ago, a group of twenty-four American cities had typhoid fever death rates which ranged from 40 to 60 deaths per 100,000 of population annually. In recent years the rate for these cities averaged around 3 per 100,000! In fact, in Fall River, Massachusetts, and Hartford, Connecticut, there were no typhoid fever deaths in the year 1924. Eighteen cities in 1924 had typhoid fever death rates less than 2.0 per 100,000!—*Bulletin Metropolitan Life Insurance Co.*

THE BOSTON Medical and Surgical Journal

Established in 1828

Published by The Massachusetts Medical Society under the jurisdiction of the following-named committee:

For three years JAMES S. STONE, M.D.
HORACE D. ARNOLD, M.D.
CHANNING PROTHINGHAM, M.D.
For two years HOMER GAGE, M.D., *Chairman*
EDWARD C. STREETER, M.D.
EDWARD W. TAYLOR, M.D.
For one year WILLIAM H. RORER, JR., M.D.
ROGER I. LEE, M.D.
ROBERT E. OSGOOD, M.D.

EDITORIAL STAFF

DAVID L. EDSELL, M.D.
WALTER B. CANNON, M.D.
RED HUNT, M.D.
FRANCIS W. FEARNOY, M.D.
JOHN P. SUTHERLAND, M.D.
S. BERT WOLBACH, M.D.
GEORGE R. MINOT, M.D.
FRANK H. LAHEY, M.D.
STEPHEN RUSHMORE, M.D.

WALTER P. BOWLES, M.D., *Managing Editor*

ASSOCIATE EDITORS

GEORGE G. SMITH, M.D.
WILLIAM H. BEEBE, M.D.
JOSEPH GARLAND, M.D.

SUBSCRIPTION TERMS: \$5.00 per year in advance, postage paid for the United States, \$7.50 per year for all foreign countries belonging to the Postal Union.

Material for early publication should be received not later than noon on Saturday. Orders for reprints must be sent to the Journal office, 126 Massachusetts Ave.

The Journal does not hold itself responsible for statements made by any contributor.

Communications should be addressed to The Boston Medical and Surgical Journal, 126 Massachusetts Ave., Boston, Mass.

AN OPTIMISTIC EXPECTATION

ACCORDING to the *New York Times*, diploma mills may be driven from the United States through the work to be done by Dr. Willard C. Rappleye and his associates on a commission appointed by the Association of American Medical Colleges. A survey continuing for five years will be undertaken and will consist of a study of medical education throughout this country. Dr. Rappleye is quoted as saying that "the members of the commission hope to right the wrong that is now so prevalent because of the action of legislatures of several states." He expects that legislatures will consult the commission before passing further laws relating to medical education and practice.

The headquarters will be at New Haven, Connecticut, where Dr. Rappleye has been the Director of the New Haven General Hospital. He will conduct the survey through personal investigation beginning next October.

His associates are: President A. Lawrence Lowell of Harvard, President Ray L. Wilbur of Stanford University, President Walter A. Jessup of the University of Iowa, Chancellor Samuel P. Capen of the University of Buffalo, Sir Robert Falconer, President of the University of Toronto, Dr. Walter L. Bierring of the National Board of Medical Examiners and

former Dean George Blumer of Yale Medical School.

The scope and effect of this survey are important matters for consideration and will be watched with great interest. So far as true medical education is concerned there are differences of opinion and practice which undoubtedly need study to bring about standardized practice, but the recommendations of a commission, however ably manned, will not materially affect the fundamental principles of medical education. The Association of Medical Colleges has been earnestly at work for many years and great progress has been made. Even without this commission there is no reasonable fear of any retrogression or harmful modification of practices now in vogue in Class A schools. The medical colleges are already carefully studying the needs of the country and some of the time-honored plans have been noticeably modified in order to enable the coming practitioner to meet the demands of the times.

The great outstanding need is for the people at large to be convinced that the greatest personal safety lies in sound medical practice. The considerable proportion of the population now endorsing the cults and disreputable schools must be weaned from the false beliefs which tend to prevent general endorsement of regular education and practice.

The expectation that a committee, however influential in medical circles, can persuade the legislatures of the several states to abolish the cults and compel the low-grade schools to raise their standards, indicates an optimism which may not be warranted, judging from past experiences.

We will be ready to share this hope when the Commission shall have led the Connecticut legislature, for example, to adopt a single standard in place of the present custom of permitting five or six boards to pass on the qualifications of practitioners. In giving legal recognition to these several systems of practice the legislature probably felt that no harm would result because of the belief that each cult would restrict the activities of the registrants to the system specified. History shows, however, that such practitioners do not always follow that expectation and there is abundant evidence that specialists of these types are particularly dangerous because of inability or indisposition to recognize some of the underlying causes of the symptoms presented by their patients. A proportion of all cultists have been known to extend activities beyond the fields claimed by them or to attempt to cure conditions by dealing with symptoms rather than pathology.

So long as the irregulars have influential endorsement, legislatures will be slow to follow the lead of the Association of Medical Colleges or the state Medical Societies because there are certain criticisms which will in the future, as they have in the past, appeal to the mind of the

average lawmaker. Even though many states have given recognition to the appeals for higher standards governing regular medical education, the great majority have also let down the bars and opened the way to the cults. This to a large extent offsets any legal control of practice. The better class medical schools would have progressed without any legal standards; indeed, laws have had very little to do in influencing most of the Class A schools for they are far above legal requirements, although it must be conceded that some of the schools on the border line have been eliminated or improved as a result of the moral and legal pressure exerted.

We expect that the great benefit which will come from the work of Dr. Rappleye's commission will be brought about by stimulating the medical profession to united and enthusiastic efforts to impress the legislatures with the need of better laws rather than any direct personal contact with lawmakers by the commission.

The legislatures must first become convinced that the electorate desires more well-trained doctors and fewer cults before any radical change can be expected to take place. So far as influential people can be brought to advocate our views results will be apparent. This is, we believe, a responsibility of the profession and until the great mass of physicians will act, we shall continue to struggle against great odds in the form of adverse sentiment. Repetition of unsound arguments relating to the alleged medical trust, and the closing of medical doors to the poor boy will find responses in the minds of many.

ABREAST OF THE TIMES

THE criticism is occasionally heard that medicine in Boston is reactionary; that instead of doing its part in furthering the progress of the science it is content to rest on the laurels won for it by Reginald Fitz, the discoverer of the nature of appendicitis, by Morton, the dentist-anesthetist, and by our world-famous surgeons of the past century.

An analysis of the situation will serve to show that Boston is still a centre of medical progress. Great discoveries such as those of arsenamine, of insulin and of the etiology of scarlet fever ordinarily come but once in a generation, and certainly it can not be held to the discredit of Boston that these should have gone to Germany, Toronto, New York and Chicago. Investigative work cannot be measured by ordinary quantitative standards and the fact must be appreciated that many years of patient and apparently fruitless toil are often necessary before a goal is obtained, and if the reward is not forthcoming or if it goes elsewhere, it does not mean that the labor was in vain, for the elimination of theories is in itself of the utmost value.

The practice and the science of medicine are nowhere on a higher plane than in our own metropolis. Fit leaders are present and they are followed by devoted workers. That the spirit of research and the zest for discovery are present may be attested to by the busy laboratories of the Peter Bent Brigham Hospital, the Huntington Cancer Hospital, the Evans Memorial of the Homeopathic Hospital and the new laboratories but recently constructed at the Boston City Hospital and the Massachusetts General Hospital, to take only these striking examples. As a tribute to the accomplishments of these institutions we might mention the fact that the medical clinics of North America have just appeared in two successive Boston numbers, and it is the first time that any city has been so honored.

Literary output is, to a certain degree, an index of successful work in medical science. The meetings of the country's clinical and scientific societies have recently taken place and it is significant to note the part that Boston men have taken in them.

Studying only those programs that happen to be at hand we find that of fifty-seven papers presented before The American Society for Clinical Investigation seventeen were by Boston workers; of forty-six presented before The Association of American Physicians three were by Boston men; of thirty-seven presented before The Association of Genito-Urinary Surgeons eight were from Boston, and of about two hundred seventy-four read at the American Medical Association meetings twenty-six were by Boston men, a total of fifty-four for these four meetings alone!

PREVENTABLE DEATHS

THE *New York State Journal of Medicine* reports that for the week ending April 18 this year, nine children died from diphtheria and an analysis of all of these cases indicates that with one possible exception all could have been saved. None of these nine children received antitoxin earlier than the fourth day of the disease. Other cases are reported showing carelessness on the part of the parents or physicians. One physician did not believe in the efficacy of antitoxin. New York State is fairly representative of the country at large. Missionaries may be useful in this country as well as in foreign lands.

The Massachusetts Medical Society

REMOVALS OF FELLOWS OF THE MASSACHUSETTS MEDICAL SOCIETY

Brides, Arthur E., Brooklyn, N. Y., from 111 Montague St. to 195 Hicks St.
Davis, Frank A., from New Haven, Conn., to Perryville, Md., U. S. Vets. Bureau Hosp. No. 42.
Gallupe, H. A., Waltham, now has his office at 751 Main St.

Hamilton, Annie Lee. Address now, Boston, Back Bay, 26 Evans Way, Suite 8.
 Hitchcock, Edward, from Boston (Suffolk) to Southbridge (Worcester), R. F. D. No. 2.
 Horan, Thomas B., of New Bedford, is temporarily at the Hospital for Ruptured and Crippled, New York City.
 Korb, Harry, from Augusta, Ga., to New York City, 125 East 103rd St.
 Lafreniere, Edward A., from Fall River (Bristol South) to Arlington (Middlesex South), 2 Orvis Rd.
 Mills, A. Ernest, from Lawrence (Essex North) to Medford (Middlesex South), 9 Wicklow Ave.
 Mills, A. Ernest, is at 9 Wicklow Ave., Medford.
 Mills, Alfred Ewing, is at 192 Central St., Somerville.
 Munro, Walter L., Providence, R. I., from 62 No. Main St. to 230 Thayer St.
 Rudy, Abraham, from Dorchester (Norfolk) to Morristown, N. J. (Non-Resident List), Psychiatric Hospital and Institute.
 Schubmehl, Frank E., from Swampscott to East Lynn, 127 Ocean St.
 Sheehan, Edward B., Boston, from 520 Beacon St. to 475 Commonwealth Ave.
 Spaulding, Harold O., has moved from Dorchester (Norfolk) to Weston (Middlesex South), where his address is P. O. Box 316.
 Stone, Ella G., Boston, from 323 Tremont St. to 80 Huntington Ave.
 Titus, Harold A., Lowell, now 225 Branch St.
 Woody, McIver, Springfield, from 248 Pearl St. to Gilbert & Barber Mfg. Co.
 Zarrella, Angelo M., Lynn, from 234 Chestnut St. to 234 Chatham St.

MISCELLANY

HEALTH STANDARDS IN NEWTON, MASS.

THE American Child Health Association has made a survey of the health conditions among children in the age period from ten to twelve years. The New England investigator studied conditions in fifteen cities having populations of from forty to seventy thousand. The City of Newton is given credit for the best results in guarding the health of its children.

Newton had the highest number of children who went to bed before 9:15 P. M., the smallest number going to bed after 10:15, the largest number getting more than ten hours' sleep, the smallest number getting less than eight, the largest number drinking a quart or more of milk a day, the smallest number drinking coffee, the largest number of bath takers, the largest number brushing teeth and the largest number to visit a dentist. Newton, however, fell down on the number of vaccinated children.

A MEETING OF THE DISTRICT PRESIDENTS AND SECRETARIES WITH THE PRESIDENT OF THE MASSACHUSETTS MEDICAL SOCIETY

ON June 24, 1925, Dr. James S. Stone, President of the Massachusetts Medical Society, entertained the Presidents and Secretaries of the District Societies at a luncheon served at the

Harvard Club. The Secretary, Dr. W. L. Burrage; the Vice-President, Dr. M. F. Fallon, and the Managing Editor of the *Journal* were also guests.

After the luncheon Dr. Stone discussed the problems before the Society for the coming year. He explained the situation relating to group insurance and explained the policy of the Society in fighting cases in order to prevent suits against the members and advocated drastic measures if it can be shown that suits are entered without just cause, or if supported by dishonest testimony. The program relating to laws governing the registration of physicians was set forth and the members were asked to participate in efforts to promote unanimity of opinion and coordinate action. The plans of the Joint Committee on Legislation will be published in due time.

The vaccination situation was explained and the bill presented by Dr. S. B. Woodward was endorsed.

An account of the conditions which led up to the purchase of the *Journal* by the Society was given in full and the hope that the other New England States would form a coalition for the purpose of converting the *Journal* into a New England Journal of Medicine was expressed, based on the fact that there is considerable evidence of a growing interest in this project.

The desirability of the formation of an organization similar to those established in many localities under the name of an Academy of Medicine was urged. It was explained that this movement must of necessity depend upon close association with the present Boston Medical Library with the understanding that the Library should maintain its own identity and organization.

The districts were well represented and great interest was shown in the remarks and suggestions submitted by the President.

A CARD OF INSTRUCTION DISTRIBUTED BY THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

PREVENTIVE MEDICINE FROM YOUR FAMILY PHYSICIAN

THERE are at least three common diseases that can be prevented. Any case of these diseases in your family means that available methods have not been used.

- (1) Smallpox may be prevented through vaccination. Recently smallpox has been widely spread over the country and in some places it has been of the malignant type.
- (2) Typhoid fever may be prevented through the periodic injection of typhoid vaccine. "Vacation" typhoid is mounting with the increased crowding of the country.
- (3) Diphtheria can be prevented in all your family. Your private physician will explain how.

Periodic health examinations at all ages may save you from diseases of middle life due to "wear and tear," such as Bright's disease, hardening of the arteries, cancer and diabetes. These diseases are increasing and can be combated by corrected habits and early recognition. Talk these matters over with your physician.

RECENT DEATHS

TRULL—Dr. WASHINGTON BENSON TRULL, one of the oldest members of the Massachusetts Medical Society, died at Annisquam, June 22, 1925, at the age of 82. Dr. Trull was a graduate of Brown University in the class of 1861 and of the University of Pennsylvania Medical Department in 1863, when his graduation thesis was on the topic "Billous Remittent Fever." He enlisted at once in the military service of the Union and served until the close of the war, holding the position of assistant surgeon, with the rank of brevet captain. He served in the Prussian army from 1870 to 1871 as volunteer assistant surgeon. He settled in Concord, Mass., having joined the state medical society in 1868. His seniors at the time of his death were Dr. L. R. Stone, 1854; Dr. S. G. Webber, 1865; Dr. S. H. Durgin, 1866, and Dr. G. S. Eddy, 1866. Dr. Trull's name was placed on the retired list in 1912, when he lived in Boston, where he had had a residence and had practised previously.

FORDYCE—JOHN ADDISON FORDYCE, June 4, 1925. Born 1858. Professor of Dermatology and Syphilis at Columbia College of Physicians and Surgeons. Especially noted for studies affecting the mucous membrane of the lip, one form having been given the name of "The Fordyce Disease." He contributed much to medical literature and was ever ready to render service to the profession and the public. He contributed to Morrow's System of Genito-Urinary Diseases, Parker's Surgery, and Wood's Reference Handbook. From 1888 to 1896 he edited the *Journal of Cutaneous and Urinary Diseases*.

OBITUARY

RESOLUTIONS ADOPTED BY THE QUINCY CITY HOSPITAL ON THE DEATH OF ETTA MAY BAGLEY

ON April 24, 1925, our Superintendent passed to her eternal rest, and to those of her co-workers who remain, it seems most fitting, that the Staff of the Quincy City Hospital should recognize and register those Sterling Qualities which characterized her life.

RESOLVED: By the death of Miss Bagley, the Quincy City Hospital and the Staff have lost and will miss those lady-like characteristics that are so essential, Tactful and Charitable; Sympathetic and Just; Efficient and Coöperative: a Superior without Ostentation; an Executive with a human heart, keeping ever in mind the welfare of our institution and the sacred trust of her profession. The precept set by her life may well be taken as a guide and example for those to follow.

Laboring faithfully while suffering from physical infirmities, never complaining, a cheery smile bespeaks the heart of our Friend and admonishes us to push on for higher ideals.

RESOLVED: The Staff of the City Hospital of Quincy can only bid her farewell with most tender memories of the past associations and feel assured our departed Superintendent is in the Happy Beyond where there is no suffering and the Weary shall find Rest.

RESOLVED: That these Resolutions be spread on the records of the Staff of the Quincy City Hospital and a copy be sent to her family.

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

DISEASES REPORTED FOR THE WEEK ENDING JUNE 20, 1925

Chickenpox	151	Ophthalmia neonatorum	27
Diphtheria	74	Pneumonia, lobar	67
Dog-bite requiring anti-rabic treatment	3	Scarlet fever	112
Encephalitis lethargica	8	Septic sore throat	3
Epidemic cerebrospinal meningitis	2	Syphilis	38
German measles	188	Suppurative conjunctivitis	16
Gonorrhea	97	Tetanus	1
Hookworm	1	Tuberculosis, pulmonary	133
Influenza	2	Tuberculosis, other forms	28
Malaria	1	Typhoid fever	7
Measles	640	Whooping cough	119
Mumps	31		

CONNECTICUT WEEKLY MORBIDITY REPORT

WEEK ENDING JUNE 20, 1925

Diphtheria	32	Dysentery (bac.)	1
Last week	31	German measles	44
Diphtheria bacilli carriers	2	Malaria	4
Scarlet fever	39	Mumps	12
Last week	35	Pneumonia (broncho)	19
Whooping cough	75	Pneumonia (lobar)	24
Last week	119	Poliomyelitis	1
Measles	163	Septic sore throat	1
Last week	279	Tuberculosis (pul.)	37
Typhoid fever	4	Tuberculosis (other forms)	1
Last week	5	Gonorrhea	21
Chickenpox	70	Syphilis	26

NEWS ITEMS

APPOINTMENT OF DR. RALPH M. CHAMBERS—Dr. Ralph M. Chambers has been appointed to succeed Dr. Ransom A. Greene as superintendent of the Taunton State Hospital. Dr. Chambers is at present acting as director of the Division for the Examination of Prisoners and for the past three years has been connected with the Department of Mental Diseases at the State House.

MEDICAL OFFICERS IN THE NAVY ASSIGNED TO MASSACHUSETTS—In assigning graduates of medical colleges recently commissioned junior lieutenants in the navy, Secretary Wilbur has sent the following named men to Boston: Newman K. Bear, David L. Beers, Leroy F. Farrell, John N. C. Gordon, Francis R. Hague, Frederick A. Hemsath, Barthol-

mew W. Hogan, German D. Scarney, Clifford A. Swanson and Frank M. Townsend.

DANGERS INCIDENT TO THE USE OF ILLUMINATING OR FUEL GAS—J. H. Shroder of Baltimore, in a study of the hazards incident to the use of gas, finds that of 145 cases 35 were due to suicidal intent, 49 to defective appliances, 17 to faulty piping, 9 to worn-out or inferior tubing, 6 undetermined and 11 the result of illness or carelessness in turning off the gas. Room heaters are especially criticised because of poor ventilation in cold weather.

FELLOWSHIPS IN NEUROPSYCHIATRY—Five fellowships in neuropsychiatry are available in the Graduate School of Medicine of the University of Pennsylvania. These fellowships have been established for the period of three years from October 12, 1925, by the Commonwealth Fund of New York. No definite fellowship stipend has been fixed; but it will in each case approximate \$2200 per annum. The precise stipend will in each case be designated by the fellowship committee.

The minimal qualifications for applicants are: (a) Age, from 25 years to 35 years inclusive; (b) graduate of Class A medical school; (c) one year's approved internship; (d) satisfactory references; (e) approval of personal and professional status.

Applications are invited for these fellowships and should be addressed to "Dean, Graduate School of Medicine, University of Pennsylvania, Philadelphia."

TESTS FOR TAXICAB DRIVERS—In Chicago a taxicab company has studied the efficiency of its drivers by certain tests which indicate the poise and response of the driver to unexpected happenings. The usual motion of a driver employed in controlling the car under these circumstances varies from a second and a quarter to 15 seconds. Two seconds is regarded as demonstrating efficiency. Among 6000 drivers 46 per cent. of the accidents were charged to 18 per cent. of the drivers.

CREMATION VERSUS BURIAL—The Cremation Society of England claims that earth burial encroaches upon the prerogatives of the living, for cemeteries block the way for rail and other roads, as well as houses and other conveniences of the living. It is claimed that cremation is cheaper to members of the society than the cheapest earth burial, the average cost amounting to over three pounds per year in England. In this country one of the two corresponding cremation societies is a Massachusetts organization.

THE GRADUATION EXERCISES OF THE COLLEGE OF PHYSICIANS AND SURGEONS, BOSTON—These exercises were conducted June 24, 1925, in the auditorium of the Municipal Building, Shawmut Avenue at West Brookline Street. There were only four persons in the graduating class.

DR. F. W. MANN, PRESIDENT OF THE MAINE MEDICAL ASSOCIATION, INJURED—While on his way to attend the annual meeting of the Maine Medical Association, Dr. F. W. Mann, the president, met with a severe accident when his car upset near Smyrna Mills. The doctor's wife and a public health nurse who were with him were also injured. Dr. Mann practised in Houlton, Me., and has been prominent in public affairs in Maine.

SOCIETY MEETINGS NEW ENGLAND STATE MEDICAL SOCIETIES

The annual meetings of the New England State Medical Societies are scheduled as follows:
Vermont State Medical Society—St. Johnsbury, Oct. 15-16, 1925.

BOOK REVIEWS

Clinical Therapeutics. By ALFRED MARTINET. Translated by Louis T. de M. Sajous. F. A. Davis Co, 1925.

The scope of these volumes may be judged by the fact that in 1740 pages of reading matter devoted to treatment, four and one-half pages are given to heliotherapy and quartz lamp, three pages (mostly illustrations of apparatus) to radium therapy, and nine uninteresting pages to psychotherapy. Fourteen separate prescriptions are given for the exhibition of sodium salicylate, and the reader is taught how to give iron in twenty-one forms. An utter lack of proportion typifies these volumes. Detail is omitted where needed and elsewhere uselessly overemphasized. It is a source of astonishment to the reviewer that Sajous should have deemed this work worthy of translation.

Dyspepsia—Its Varieties and Treatment. By W. SOLTAN FENWICK. W. B. Saunders Co. Second Edition.

This book bears between its covers its own internal criticism. The bibliography contains but one article dated later than 1909, the vast majority belonging to the period 1880-1890, at which time the material for the volume was evidently collected. The present edition attempts "no alteration in the general scheme of the work," and as a result the point of view on "dyspepsias" is that of a generation ago when Hyperacidity, Hypersecretion, Myasthenia, Gastrica, and acute and chronic Gastritis were disease entities. It is more than a little disturbing to find in a volume published last year, gastric ulcer considered only as a subheading under, and cause of gastric Hypersecretion. The Chapter titled "Dyspepsia dependent upon Diseases of other Organs" covers a field too little emphasized even today.

Personal Hygiene Applied. (Second Edition Revised) By JESSE FEIRING WILLIAMS, M.D. Philadelphia and London: W. B. Saunders Company, 1925. \$2.00.

This comprehensive book, planned as a guide for college students, covers a wide field. It is written in a semi-popular style but with a sound basis of scientific fact. It ought to appeal to a large group of college physicians, nurses, social workers and teachers. A physician could safely place such a book in the hands of a patient who wished to understand preventative medicine and the reasons why measures such as typhoid inoculation have been so successful in enlightened communities. Much of the material on patent medicines has been taken from the records of the American Medical Association. Numerous references are given to the more important literature. The book can be highly recommended.